

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

**FORM S-1
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

Artiva Biotherapeutics, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

2836
(Primary Standard Industrial
Classification Code Number)

83-3614316
(I.R.S. Employer
Identification No.)

5505 Morehouse Drive, Suite 100
San Diego, CA 92121
(858) 267-4467

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement is declared effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. ☐

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐
Non-accelerated filer ☒

Accelerated filer ☐
Smaller reporting company ☒
Emerging growth company ☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is declared effective. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JUNE 28, 2024

PRELIMINARY PROSPECTUS

Shares



We are offering _____ shares of our common stock. This is our initial public offering, and no public market currently exists for our common stock. We currently expect that the initial public offering price will be between \$ _____ and \$ _____ per share of our common stock. We have applied to list our common stock on the Nasdaq Global Market (Nasdaq) under the symbol “ARTV.” We believe that upon the completion of this offering, we will meet the standards for listing on Nasdaq, and the closing of this offering is contingent upon such listing.

We are an “emerging growth company” and a “smaller reporting company” as defined under the U.S. federal securities laws and, as such, may elect to comply with certain reduced public company reporting requirements in future reports after the closing of this offering. See the section titled “Prospectus Summary—Implications of Being an Emerging Growth Company and a Smaller Reporting Company.”

Investing in our common stock involves risks. See the section titled “[Risk Factors](#)” beginning on page 13 of this prospectus to read about factors you should consider before buying shares of our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

	PER SHARE	TOTAL
Initial Public Offering Price	\$ _____	\$ _____
Underwriting Discounts and Commission ⁽¹⁾	\$ _____	\$ _____
Proceeds to Artiva Biotherapeutics, Inc., Before Expenses	\$ _____	\$ _____

⁽¹⁾ See the section titled “Underwriting” for additional information regarding underwriting compensation.

Delivery of the shares of common stock is expected on or about _____, 2024.

We have granted the underwriters an option for a period of 30 days to purchase up to an additional _____ shares of our common stock. If the underwriters exercise the option in full, the total underwriting discounts and commissions payable by us will be \$ _____ and the total proceeds to us, before expenses, will be \$ _____.

Jefferies

TD Cowen

Cantor

Wedbush PacGrow

Needham & Company

TABLE OF CONTENTS

PROSPECTUS SUMMARY	1
RISK FACTORS	13
SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS	79
INDUSTRY AND OTHER DATA	81
DIVIDEND POLICY	82
USE OF PROCEEDS	83
CAPITALIZATION	85
DILUTION	87
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	90
BUSINESS	112
MANAGEMENT	169
EXECUTIVE AND DIRECTOR COMPENSATION	177
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS	195
PRINCIPAL STOCKHOLDERS	200
DESCRIPTION OF CAPITAL STOCK	203
SHARES ELIGIBLE FOR FUTURE SALE	208
MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS	210
UNDERWRITING	214
LEGAL MATTERS	223
EXPERTS	223
WHERE YOU CAN FIND MORE INFORMATION	223
INDEX TO FINANCIAL STATEMENTS	F-1

We and the underwriters have not authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses we have prepared. We and the underwriters take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may provide you. We are offering to sell, and seeking offers to buy, shares of common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the common stock.

For investors outside the United States: Neither we nor the underwriters have done anything that would permit this offering, or the possession or distribution of this prospectus, in any jurisdiction where action for those purposes is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, this offering of common stock and the distribution of this prospectus outside the United States.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus. This summary does not contain all of the information you should consider before investing in our common stock. Before investing in our common stock, you should read this entire prospectus carefully, especially the sections titled “Risk Factors,” “Special Note Regarding Forward-Looking Statements,” and “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and our financial statements and the related notes appearing elsewhere in this prospectus. As used in this prospectus, unless the context otherwise requires, references to “we,” “us,” “our,” “the company” and “Artiva” refer to Artiva Biotherapeutics, Inc.

Overview

We are a clinical-stage biotechnology company focused on developing natural killer (NK) cell-based therapies for patients suffering from devastating autoimmune diseases and cancers. Our product candidates are derived from donor cells (allogeneic) rather than a patient’s own cells (autologous) and are pre-manufactured, stored frozen and ready to ship to a patient’s treatment location, making them what we believe to be “off-the-shelf.” Our lead product candidate, AlloNK, is a non-genetically modified, cryopreserved NK cell therapy being evaluated in combination with B-cell targeted monoclonal antibodies (mAbs) in an ongoing Phase 1/1b trial in class III or IV lupus nephritis (LN) and a basket investigator-initiated trial (IIT) in multiple autoimmune indications. Seminal peer-reviewed clinical studies using autologous CD19 chimeric antigen receptor (CAR) T-cell therapy (auto-CAR-T) for the treatment of autoimmune diseases have demonstrated that deep B-cell depletion in the periphery and in the lymphoid tissue can lead to drug-free disease remission. We have already demonstrated that AlloNK in combination with rituximab was able to drive deep B-cell depletion in the periphery and observed complete responses in heavily pre-treated patients naïve to auto-CAR-T in our ongoing Phase 1/2 clinical trial in patients with relapsed or refractory B-cell non-Hodgkin lymphoma (B-NHL). We believe the preliminary results from our Phase 1/2 clinical trial evaluating AlloNK in combination with rituximab in patients with B-NHL provide a readthrough to autoimmune disease because efficacy in both diseases appears to be accomplished with a shared mechanism of action involving B-cell depletion in the periphery and in the lymphoid tissues, followed by an immunological reset and B-cell reconstitution. We expect to report initial data on autoimmune indications from at least one of our Phase 1/1b trial or the basket IIT in the first half of 2025.

To our knowledge, AlloNK was the first allogeneic, off-the-shelf NK cell therapy candidate to receive Investigational New Drug application (IND) clearance to be administered to a patient with an autoimmune disease in a U.S. clinical trial, and to receive United States Food and Drug Administration (FDA) Fast Track designation in an autoimmune disease. Additionally, to our knowledge AlloNK is the first allogeneic NK cell therapy candidate in the United States to receive IND clearance for a basket trial in autoimmune diseases, and specifically the first to be evaluated in rheumatoid arthritis (RA), pemphigus vulgaris (PV) and the anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis (AAV) subtypes granulomatosis with polyangiitis (GPA) / microscopic polyangiitis (MPA), which we are exploring through a basket IIT. We believe as we continue to execute on our strategic plan that these critical first mover advantages will solidify our leadership in multiple autoimmune diseases with high unmet need. Receiving IND clearance and any special designations, such as Fast Track designation, does not guarantee an accelerated review of AlloNK or increase the likelihood of approval of AlloNK by the FDA. Given our early stage of development, it will take several years before we complete clinical development and receive regulatory approval of AlloNK or any of our product candidates, if at all.

B-Cell Driven Autoimmune Disease Background, Prevalence and Unmet Need

Many autoimmune diseases occur when autoreactive B-cells produce autoantibodies that target the body’s own healthy cells and tissues, which can lead to significant morbidity and long-term use of immunosuppressants and steroids. This presents an opportunity to develop treatments that deplete B-cells in a variety of autoimmune diseases such as RA, multiple sclerosis (MS), systemic lupus erythematosus (SLE), LN, AAV, systemic sclerosis (SSc), myasthenia gravis (MG) and myositis, which together account for approximately

6.8 million patients in the United States and Europe alone. Global sales for autoimmune disease, treatments for which in 2023 reached approximately \$160 billion and represent the second-largest class of spending behind oncology, are expected to continue to grow.

Approved treatments for autoimmune diseases encompass various classes of therapies, including steroids, mycophenolate mofetil (MMF), anti-tumor necrosis factor alpha (TNF α) agents and interleukin (IL) inhibitors. Even though these therapies largely provide general immunosuppression and manage symptoms of disease, many patients still suffer from disease progression, leading to worsening complications. Furthermore, chronic use of these therapies typically creates secondary complications for patients, including, but not limited to, increased risk of infections and cancer, cardiovascular disease, hypertension, Cushing's disease, diabetes and osteoporosis.

While auto-CAR-T cell therapies have demonstrated the transformative potential of cell therapy, adoption has been limited since their initial approvals due to several factors, including, but not limited to, safety, patient access and scalability. We believe AlloNK in combination with B-cell targeted mAbs represents the next-generation of B-cell depleting therapies because it aims to address important limitations of auto-CAR-T, including:

- **Scalability:** AlloNK can be manufactured at scale, cryopreserved, easily transported through cold-chain logistics, and we believe be made readily available for patients. In contrast, auto-CAR-T requires a complex, costly and lengthy manufacturing process that is individualized for each patient. The need for hospitalization further compounds the challenges of scalability and access, adding financial burden to the healthcare system. For example, toxicity and extended hospitalization from treatment with auto-CAR-T could add an incremental financial burden of over \$1 million per patient. The scalability of our process creates the potential to expand treatment access to the many autoimmune patients annually who currently live with the consequences of long-term steroid use.
- **Safety:** As a result of autologous and allogeneic CAR-T cell therapies' association with immune effector cell-associated neurotoxicity syndrome (ICANS), cytokine release syndrome (CRS) and other severe adverse events, treatment is generally only available at advanced clinical centers capable of supporting these patients. Conversely, in our clinical trial of AlloNK in combination with rituximab in patients with relapsed or refractory B-NHL, as of April 8, 2024, more than two-thirds of the patients were not hospitalized within 30 days of dosing AlloNK. We believe this demonstrates the ability of AlloNK to be administered and managed in an outpatient setting, with limited risk of required hospitalization.
- **Cost:** Cost of goods sold (COGS) to manufacture auto-CAR-Ts is estimated at over \$100,000 per treatment course, limiting flexibility in therapy pricing. Assuming two billion AlloNK cells per dose and three doses for a treatment regimen of an aggregate of six billion AlloNK cells total per patient with autoimmune disease, AlloNK's COGS per patient would be below \$6,000, an order of magnitude below the current COGS of auto-CAR-T. As auto-CAR-Ts move from their currently marketed indication of hematological malignancies towards chronic and more prevalent autoimmune diseases, AlloNK's extremely competitive commercial COGS could allow for advantageous pricing flexibility and payor coverage, if approved.

Our Pipeline

Our lead product candidate, AlloNK, is currently being evaluated in combination with B-cell targeted mAbs in patients with autoimmune diseases and cancers, such as LN, RA, PV, the ANCA-associated vasculitis subtypes GPA / MPA, SLE and B-NHL. In addition, we are also pursuing AlloNK and our CAR-NK product candidates in multiple indications through collaborator-funded trials. Our current pipeline is depicted below.

Product Candidate	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Partnerships
Artiva-funded Trials	▪ LN	+ Rituximab + Obinutuzumab				
	▪ RA ▪ PV ▪ Vasculitis (GPA/MPA) ▪ SLE	Investigator-Initiated Basket Trial ⁽¹⁾				
	ADCC-Enhancer ▪ NHL	+ Rituximab				
Collaborator-funded Trials	▪ HL	+ Acimtamig ⁽²⁾				AFFIRMED
	CAR-NK (AB-201) ▪ Solid tumors	HER2-CAR-NK				GC Cell
	CAR-NK (AB-205) ▪ Hematological malignancies	CD5-CAR-NK				GC Cell

Note: Artiva holds ex-APAC rights to all programs.

(1) The IIT will initially enroll patients with RA, PV, GPA / MPA and SLE.

(2) In November 2022, Affirmed N.V. (Affirmed) announced a collaboration with Artiva to advance development of the combination of acimtamig and AlloNK into a potential registration enabling study, LuminICE-203. In May 2023, Affirmed announced the FDA clearance of the IND for the clinical study evaluating the combination of acimtamig and AlloNK in patients with relapsed or refractory Hodgkin lymphoma and CD30+ positive peripheral T-cell lymphoma, initiated enrollment into the study in October 2023 and presented initial data from the first seven patients in June 2024.

AlloNK Overview

AlloNK is an allogeneic, off-the-shelf, cryopreserved NK cell therapy candidate designed to enhance the antibody-dependent cellular cytotoxicity (ADCC) effect of mAbs to drive B-cell depletion and to be administered in the community setting. Using our proprietary cell therapy manufacturing platform, we can generate thousands of doses of cryopreserved, infusion-ready AlloNK from a single cord blood unit.

Our lead product candidate, AlloNK, is being evaluated in combination with B-cell targeted mAbs in an ongoing Phase 1/1b trial in patients with class III or IV LN, a type of kidney disease that manifests from SLE, and a basket IIT in multiple autoimmune indications. LN is reported to affect approximately half of all patients with SLE. There are an estimated 210,000 SLE patients with LN across the United States and Europe, and approximately 30% do not respond to currently available treatments and can develop end stage renal disease and require dialysis. We are focusing on LN as the first target of our clinical development program in light of the clearly identifiable patient group, significant unmet need and presence of measurable clinical endpoints to facilitate regulatory approval submissions. We have begun dosing and are continuing to enroll our Phase 1/1b open-label multi-center clinical trial in combination with rituximab or obinutuzumab in patients with class III

or IV LN who previously failed treatment. In addition, AlloNK in combination with rituximab or obinutuzumab has been granted Fast Track designation by the FDA to improve disease activity in patients with class III or IV LN. We also received Fast Track designation for AlloNK for intravenous (IV) infusion in combination with rituximab for the treatment of relapsed or refractory B-NHL to improve cancer response rates. Fast Track designation does not guarantee an accelerated review of AlloNK or increase the likelihood that AlloNK will receive regulatory approval by the FDA. We intend to pursue additional autoimmune diseases with AlloNK in combination with B-cell targeted mAbs.

In April 2024, the FDA cleared an IND submitted by Integral Rheumatology & Immunology Specialists (IRIS), a large community practice rheumatology clinic in Florida, to conduct a basket IIT to assess the safety, tolerability and clinical activity of AlloNK in combination with rituximab in patients with RA, PV, the ANCA-associated vasculitis subtypes GPA / MPA and SLE. We expect to report initial data on autoimmune indications from at least one of our Phase 1/1b trial or the basket IIT in the first half of 2025. We will supply AlloNK and funding for the IIT, but unlike our sponsored clinical trials, IRIS will be the regulatory sponsor of, and responsible for, the conduct of the IIT.

Because AlloNK can be used with mAbs that target different antigens based on the target cell's antigen expression, we believe we have the versatility to use AlloNK in combination with different mAbs to deplete distinct B-cell subpopulations. AlloNK has the potential to be used with a CD19 or CD20 targeting mAb to determine which drives a more robust response. Furthermore, emerging evidence with auto-CAR-T targeting B-cell maturation antigen (BCMA), a plasma cell antigen, either alone or dual-targeted with CD19, has shown distinct therapeutic activity in several indications when compared with CD19-only auto-CAR-T. We believe AlloNK in combination with approved anti-CD38 mAbs could target a similar plasma cell population. We believe this versatility will enable us to pursue a wider range of indications than cell therapies engineered against specific targets.

Our Collaborator-Funded Trials

We have a collaboration with Affimed GmbH, a subsidiary of Affimed N.V. (Affimed), whereby we are investigating AlloNK in a Phase 2 trial in combination with acimtamig, a CD30-targeted NK cell engager, in CD30+ Hodgkin lymphoma (HL). In addition, we own exclusive worldwide rights (excluding Asia, Australia and New Zealand (ex-APAC)) for AB-201, a human epidermal growth factor receptor 2 (HER2) targeting CAR-NK cell product candidate and for AB-205, a CD5 directed CAR-NK cell product candidate.

Manufacturing Capabilities

We have a manufacturing-first approach, referencing the fact that even before we were founded, our strategic partner, GC Cell Corporation (GC Cell), had already invested years pioneering the manufacturing process that we use today. Unlike most other companies in the NK field who started clinical development before establishing a scalable manufacturing process, we started clinical development with a mature and robust process in place. Our process is designed to allow us to produce off-the-shelf, allogeneic NK cell therapy candidates and to potentially meet the scale of commercial demand, with the mission to make these therapies broadly accessible for patients with devastating autoimmune diseases and cancers. We leveraged our deep expertise in NK cell biology to establish an end-to-end proprietary process in collaboration with GC Cell. In our San Diego headquarters, we have established a 9,000 square foot, purpose-built cell production center that is compliant with current Good Manufacturing Practices (cGMP) and capable of producing enough vials to treat over 1,000 autoimmunity patients annually. Furthermore, assuming two billion AlloNK cells per dose and three doses for a treatment regimen of an aggregate of six billion AlloNK cells total per patient with autoimmune disease, AlloNK COGS per patient would be below \$6,000, an order of magnitude below the current COGS of auto-CAR-T.

Our Management Team, History and Investors

We were founded in 2019 as a spin out of GC Cell, formerly GC Lab Cell Corporation, a leading healthcare company in the Republic of Korea (Korea), pursuant to a strategic partnership granting us exclusive, worldwide, ex-APAC, rights to GC Cell's NK cell manufacturing technology and programs.

Our team is led by executives who have deep experience in their respective functions in cell therapy with multi-faceted experience across a company's life cycle.

We have been supported by leading life science investors, including 5AM Venture Management, LLC, RA Capital Management and venBio Partners. Prospective investors should not rely on the investment decisions of our existing investors, as these investors may have different risk tolerances and received their shares in prior offerings at prices lower than the price offered to the public in this offering. In addition, some of these investors may not be subject to reporting requirements under Section 16 of the Securities Exchange Act of 1934, as amended (the Exchange Act), and, thus, prospective investors may not necessarily know the total amount of investment by each of the prior investors and if and when some of the prior investors decide to sell any of their shares.

Our Mission

Our mission is to develop effective, safe and accessible cell therapies for patients with devastating autoimmune diseases and cancers.

Our Strengths

We believe that our company and therapeutic candidates possess the following competitive strengths:

- Autoimmune disease treatment approach supported through scientific publications and our ongoing clinical trial.
- Versatile mAb combination approach allows flexibility to tailor targeting approach to specific B-cell subpopulations.
- Proprietary manufacturing process allows for scalable and potentially cost effective AlloNK production.
- Non-genetically modified cell therapy has not shown integrating vector-induced secondary malignancies, which is a benefit in an autoimmunity setting.
- AlloNK cell approach aims to broaden community access, drive improved patient experience, improve clinical recruitment timelines and expand commercial opportunity.
- Strategic execution led to first-mover advantage in autoimmune disease.
- Leading scientific advisors who guide our development strategy in autoimmune disease.

Our Strategy

Our strategy is to develop safe and effective NK cell-based therapies that patients and physicians can utilize in a community setting. We believe the compelling cell killing properties of NK cells, when combined with mAbs for targeting, creates an opportunity to generate potentially transformative therapies. Key elements of our strategy include:

- Advance our lead product candidate, AlloNK, through clinical development and demonstrate the clinical potential of NK cell therapies in autoimmune diseases.
- Demonstrate the clinical potential of NK cell therapies to address limitations of auto-CAR-T cell therapies.
- Expand AlloNK development across several autoimmune indications utilizing different mAbs.
- Continue to evaluate and pursue tailored strategies to advance our platform capabilities and maximize patient access to AlloNK.

Diversity, Equity and Inclusion

As of May 31, 2024, we had 81 full-time employees. We are committed to continuing to build and maintain a diverse and inclusive company. We believe focusing on diversity is the right thing to do and is a competitive advantage with our plans for additional hiring. We are purposeful in our efforts to attract and retain top diverse talent from underrepresented groups as reflected throughout our company:

- Executives: 33% female, 33% diverse (defined as ethnic representation);

- Managers and scientists with managerial responsibilities: 47% female, 47% diverse (defined as ethnic representation); and
- Professional and individual contributor scientific roles: 59% female, 53% diverse (defined as ethnic representation).

Company Social Responsibility

We are committed to corporate social responsibility, our patients, and the communities we serve, as reflected in our decision to join the Pledge 1% Movement. The Pledge 1% Movement is a global movement that supports the integration of philanthropy into corporate culture by inspiring companies to donate 1% of product, equity, profit, or employee time to causes of their choice. We were one of the first biotechnology companies to join the Pledge 1% Movement, and through this commitment we are inspiring, educating and empowering our team members to support our community.

Risks Affecting Our Business

Our business is subject to a number of risks that you should carefully consider before making a decision to invest in our common stock. These risks are more fully described in the section titled “Risk Factors” immediately following this prospectus summary. These risks include, among others, the following:

- We have a limited operating history, have not completed any clinical trials and have no products approved for commercial sale, which may make it difficult for you to evaluate our current business and predict our future success and viability.
- Even if this offering is successful, we will need to obtain substantial additional funding to complete the development and any commercialization of our current and any future product candidates, which may cause dilution to our stockholders. If we are unable to raise this capital when needed, we may be forced to delay, reduce or eliminate our research and development programs or other operations.
- Our approach to the development of NK cell-based product candidates is unproven, and we do not know whether we will be able to develop any products of commercial value, or if competing technological approaches will limit the commercial value of our product candidates or render our platform obsolete.
- Our product candidates are based on novel technologies, which makes it difficult to predict the time and cost of developing product candidates and obtaining regulatory approval for any product candidates that we develop.
- We are early in our development efforts and are substantially dependent on the success of our lead product candidate, AlloNK, which is in early clinical development. Although we have other product candidates in our pipeline being developed by our partners, all of our other internally developed product candidates are in the preclinical or discovery stage. If we are unable to advance our product candidates in clinical development, obtain regulatory approval and ultimately commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed.
- Current clinical data regarding the efficacy of NK cell therapies against autoimmune diseases are limited, raising uncertainties about the therapeutic benefits of treatments like AlloNK for conditions such as LN and other autoimmune diseases. Moreover, these therapies may not prove to be competitive compared to existing treatments for autoimmune diseases.
- Clinical trials are expensive, time-consuming, difficult to design and implement, and have an uncertain outcome. Further, we may encounter substantial delays in our clinical trials.
- Our product candidates may cause serious adverse events or undesirable side effects or have other properties that may delay or prevent regulatory approval, cause us to suspend or discontinue clinical trials, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.
- Enrollment and retention of patients in clinical trials is an expensive and time-consuming process subject to various external factors beyond our control that may cause delays or complications.

- Results of any patient who receives our product candidate in an IIT should not be viewed as representative of how the product candidate will perform in our clinical trials and may not be able to be used to establish safety or efficacy for regulatory approval.
- The affected populations for our product candidates may be smaller than we or third parties currently project, which may affect the addressable markets for our product candidates.
- Our collaboration agreements with Affimed, GC Cell and any future collaborations with third parties to develop or commercialize our product candidates, mean that our prospects with respect to the product candidates involved will depend in significant part on the success of those collaborations.
- The manufacture of cell therapy products is novel, complex and subject to multiple risks. We could experience manufacturing problems, and/or we could be required to or choose to modify our manufacturing processes, which could result in delays in the development or commercialization of our product candidates or otherwise harm our business.
- We currently significantly rely on GC Cell for the manufacturing of our product candidates. While we have built our own clinical manufacturing facility and may decide to build our own commercial-scale manufacturing facility, we may encounter delays, quality or other issues if and when we begin to use our manufacturing facility for supply, and will continue to rely on GC Cell at least partially for manufacturing of our product candidates in the near term.
- Our partial reliance on third parties for manufacturing increases the risk that supply of our product candidates may become limited or interrupted or may not be of satisfactory quality and quantity.
- We are dependent on third parties to acquire, ship and store our cord blood units, NK cell master cell banks and drug product lots, viral vectors, and master and working feeder cell banks, and any disruption, quality concerns, damage or loss would cause delays in replacement and our business could suffer.
- Our cell therapy products depend on the availability of reagents and specialized materials and equipment, including cord blood and viral vectors, which in each case are required to be acceptable to the FDA and comparable foreign regulatory authorities, and such reagents, materials, and equipment may not be available to us on acceptable terms or at all. We and our third-party manufacturers rely on third-party suppliers for various components, materials and equipment required for the manufacture of our product candidates, some of which are single-source products, and do not have supply arrangements for certain of these components.
- We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.
- We depend substantially on intellectual property rights granted under our agreements with GC Cell. If we lose our existing licenses or are unable to acquire or license additional proprietary rights from third parties, we may not be able to continue developing our product candidates.
- We will need to expand our organization, and we may experience significant challenges in managing this growth as we build our capabilities, which could disrupt our operations.
- Our future success depends on our ability to retain our key personnel and to attract, retain and motivate qualified personnel.
- A significant portion of our total outstanding shares are eligible to be sold into the market in the near future, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Our Corporate Information

We were incorporated under the laws of the State of Delaware in February 2019. Our principal executive offices are located at 5505 Morehouse Drive, Suite 100, San Diego, California 92121, and our telephone number is (858) 267-4467. Our website address is www.artivabio.com. The information contained on, or accessible through, our website is not incorporated by reference into this prospectus, and you should not consider any information contained in, or that can be accessed through, our website as part of this prospectus or in deciding whether to purchase our common stock.

This prospectus contains references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this prospectus, including logos, artwork and other visual displays, may appear without the ® or TM symbols, but such references are not intended to indicate, in any way, that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other companies.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

We are an "emerging growth company" as defined in the Jumpstart Our Business Startups Act (JOBS Act), enacted in April 2012. An "emerging growth company" may take advantage of reduced reporting requirements that are otherwise applicable to public companies. These provisions include, but are not limited to:

- being permitted to present only two years of audited financial statements and only two years of related Management's Discussion and Analysis of Financial Condition and Results of Operations in this prospectus;
- not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, as amended (Sarbanes-Oxley Act);
- reduced disclosure obligations regarding executive compensation in our periodic reports, proxy statements and registration statements; and
- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved.

We may use these provisions until the last day of our fiscal year following the fifth anniversary of the completion of this offering. However, if certain events occur prior to the end of such five-year period, including if we become a "large accelerated filer," our annual gross revenues exceed \$1.235 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period.

We have elected to take advantage of certain of the reduced disclosure obligations in the registration statement of which this prospectus is a part and may elect to take advantage of other reduced reporting requirements in future filings. As a result, the information that we provide to our stockholders may be different than you might receive from other public reporting companies in which you hold equity interests.

The JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. We have elected to use the extended transition period for complying with new or revised accounting standards and as a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates. However, we may elect to early adopt any new or revised accounting standards whenever such early adoption is permitted for non-public companies. We may take advantage of these exemptions up until the time that we are no longer an emerging growth company.

We are also a "smaller reporting company" as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

The Offering

Common stock offered by us	shares.
Option to purchase additional shares of common stock	We have granted the underwriters an option for a period of 30 days to purchase up to additional shares of common stock.
Common stock to be outstanding immediately after this offering	shares (or shares if the underwriters exercise their option to purchase additional shares in full).
Use of proceeds	We estimate that the net proceeds to us from this offering will be approximately \$ million, or approximately \$ million if the underwriters exercise their option to purchase additional shares in full, assuming an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, to (i) fund the clinical development of AlloNK; and (ii) the remainder for additional discovery activities and preclinical development across our pipeline programs, as well as headcount costs, manufacturing and supply activities, working capital and other general corporate purposes. See the section titled "Use of Proceeds."
Risk factors	See the section titled "Risk Factors" and the other information included in this prospectus for a discussion of factors you should consider carefully before deciding to invest in our common stock.
Proposed Nasdaq Global Market symbol	"ARTV"

The number of shares of our common stock to be outstanding after this offering is based on 3,551,690 shares of our common stock outstanding as of March 31, 2024, after giving effect to (i) the conversion of all our outstanding shares of convertible preferred stock into 27,019,554 shares of common stock in connection with the closing of this offering and (ii) the conversion of all our outstanding simple agreements for future equity (SAFEs) into shares of common stock, based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, at a 15% discount to the initial public offering price, in connection with the closing of this offering and excludes:

- 6,568,326 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2024, under our 2020 Equity Incentive Plan (the 2020 Plan), with a weighted-average exercise price of \$1.15 per share;
- 98,750 shares of common stock issuable upon the vesting and settlement of restricted stock units outstanding as of March 31, 2024, under our 2020 Plan;
- 1,421,000 shares of our common stock (1,245,000 to executive officers, 60,000 to non-employee directors and 116,000 to other employees and consultants) issuable upon the exercise of outstanding stock options granted subsequent to March 31, 2024, under our 2020 Plan, with a weighted-average price of \$3.07 per share;

- shares of our common stock issuable upon the exercise of stock options to be granted to certain of our employees and executive officers under the 2024 Equity Incentive Plan (the 2024 Plan), which will become effective upon the execution and delivery of the underwriting agreement for this offering, with an exercise price that is equal to the initial public offering price in this offering;
- shares of common stock reserved for future issuance under the 2024 Plan (which shares include new shares plus the number of shares (not to exceed shares) (i) that remain available for the issuance of awards under the 2020 Plan at the time the 2024 Plan becomes effective, and (ii) any shares underlying outstanding stock awards granted under the 2020 Plan that, on or after the 2024 Plan becomes effective, terminate or expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section titled “Executive and Director Compensation—Equity Incentive Plans”), as well as any automatic increases in the number of our common stock reserved for future issuance under the 2024 Plan;
- shares of our common stock reserved for future issuance under our 2024 Employee Stock Purchase Plan (the ESPP), as well as any annual automatic increases in the number of shares of our common stock reserved for future issuance under the ESPP, which will become effective upon the execution and delivery of the underwriting agreement for this offering; and
- 370,865 shares of our common stock reserved for issuance pursuant to the Pledge 1% Movement campaign. See the section titled “Business—Corporate Philanthropy” for more information.

Unless otherwise indicated, all information contained in this prospectus reflects and assumes the following:

- the conversion, in accordance with our existing amended and restated certificate of incorporation, of all outstanding shares of our convertible preferred stock into an aggregate of 27,019,554 shares of our common stock in connection with the closing of this offering;
- shares of common stock to be issued pursuant to our outstanding SAFEs, based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, at a 15% discount to the initial public offering price, in connection with the closing of this offering;
- no exercise of the outstanding options described above;
- no vesting or settlement of the restricted stock units described above;
- no exercise by the underwriters of their option to purchase up to a total of additional shares of our common stock;
- the filing and effectiveness of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws immediately prior the closing of this offering; and
- a 1-for- reverse stock split of our common stock to be effected prior to the closing of this offering.

Summary Financial Data

The following tables summarize our financial data as of and for the periods indicated. We have derived the summary statements of operations data for the years ended December 31, 2022 and 2023 from our audited financial statements included elsewhere in this prospectus. We have derived the summary statements of operations data for the three months ended March 31, 2023 and 2024, and the summary balance sheet data as of March 31, 2024, from our unaudited interim condensed financial statements included elsewhere in this prospectus. Our unaudited interim condensed financial statements have been prepared on a basis consistent with our audited financial statements and, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the financial information set forth in those statements. Our historical results presented below are not necessarily indicative of the results to be expected for any future period. The following summary financial data should be read in conjunction with the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

	YEAR ENDED DECEMBER 31,		THREE MONTHS ENDED MARCH 31,	
	2022	2023	2023	2024
	(unaudited)			
	(in thousands, except share and per share data)			
STATEMENTS OF OPERATIONS DATA:				
Revenue:				
Collaboration revenue	\$ 4,931	\$ 32,923	\$ 989	\$ —
License and development support revenue	—	569	—	251
Total revenue	4,931	33,492	989	251
Operating expenses:				
Research and development	43,984	50,251	14,771	11,156
General and administrative	20,776	13,912	3,906	3,587
Total operating expenses	64,760	64,163	18,677	14,743
Loss from operations	(59,829)	(30,671)	(17,688)	(14,492)
Other income:				
Interest income	1,294	2,535	1,024	650
Change in fair value of SAFEs	—	(707)	—	(268)
Other income (expense), net	(200)	195	(53)	147
Total other income, net	1,094	2,023	971	529
Loss before provision for income taxes	(58,735)	(28,648)	(16,717)	(13,963)
Provision for income taxes	(53)	(72)	—	—
Net loss	\$ (58,788)	\$ (28,720)	\$ (16,717)	\$ (13,963)
Net loss per share, basic and diluted ⁽¹⁾	\$ (17.48)	\$ (8.16)	\$ (4.80)	\$ (3.93)
Weighted-average common shares outstanding, basic and diluted ⁽¹⁾	3,362,922	3,520,935	3,482,032	3,551,690
Pro forma net loss per share, basic and diluted (unaudited) ⁽²⁾		\$		\$
Pro forma weighted-average shares of common stock, basic and diluted (unaudited) ⁽²⁾				

⁽¹⁾ See Note 2 to our audited financial statements and our unaudited condensed financial statements included elsewhere in this prospectus for details on the calculation of basic and diluted net loss per share.

⁽²⁾ Pro forma net loss per share, basic and diluted, attributable to common stockholders, is calculated giving effect to the conversion of the convertible preferred stock and our outstanding SAFEs into shares of common stock. Pro forma net loss per

share attributable to common stockholders does not include the shares expected to be sold and related proceeds to be received in this offering. Unaudited pro forma net loss per share attributable to common stockholders for the year ended December 31, 2023 and three months ended March 31, 2024 was calculated using the weighted-average number of shares of common stock outstanding, including the pro forma effect of the conversion of all outstanding shares of our convertible preferred stock and our SAFEs into shares of our common stock, as if such conversion had occurred at the beginning of the period.

	AS OF MARCH 31, 2024		
	ACTUAL	PRO FORMA ⁽¹⁾ (unaudited) (in thousands)	PRO FORMA AS ADJUSTED ⁽²⁾ (3)
BALANCE SHEET DATA:			
Cash, cash equivalents and short-term investments	\$ 62,134	\$	\$
Working capital ⁽⁴⁾	55,518		
Total assets	90,161		
Total liabilities	48,421		
Convertible preferred stock	216,413		
Accumulated deficit	(195,274)		
Total stockholders' (deficit) equity	(174,673)		

- (1) Gives effect to (i) the automatic conversion of all outstanding shares of convertible preferred stock into an aggregate of 27,019,554 shares of our common stock and the related reclassification of the convertible preferred stock to permanent equity in connection with the closing of this offering, (ii) the automatic conversion of our outstanding SAFEs into an aggregate of shares of common stock, based on an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, at a 15% discount to the initial public offering price, in connection with the closing of this offering and (iii) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur immediately prior to the closing of this offering.
- (2) Gives effect to (i) the pro forma adjustments set forth in footnote (1) above and (ii) our sale of _____ shares of common stock in this offering at an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.
- (3) Pro forma as adjusted balance sheet data is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) each of our pro forma as adjusted cash, cash equivalents and short-term investments, working capital, total assets and total stockholders' (deficit) equity by approximately \$ _____ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each one million share increase (decrease) in the number of shares offered by us would increase (decrease) each of our pro forma as adjusted cash, cash equivalents and short-term investments, working capital, total assets and total stockholders' (deficit) equity by approximately \$ _____ million, assuming that the assumed initial offering price to the public remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.
- (4) We define working capital as current assets less current liabilities. See our unaudited condensed financial statements and related notes included elsewhere in this prospectus for further details regarding our current assets and current liabilities.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risks and uncertainties, together with all of the other information contained in this prospectus, including our financial statements and related notes included elsewhere in this prospectus, and the section titled "Management's Discussion and Analysis of Financial Condition and Results of Operations," before making an investment decision. The risks described below are not the only ones facing us. The occurrence of any of the following risks, or of additional risks and uncertainties not presently known to us or that we currently believe to be immaterial, could materially and adversely affect our business, prospects, financial condition or results of operations. In such case, the trading price of our common stock could decline, and you may lose part or all of your investment.

Risks Related to Our Limited Operating History, Financial Position and Need for Additional Capital

We have a limited operating history, have not completed any clinical trials and have no products approved for commercial sale, which may make it difficult for you to evaluate our current business and predict our future success and viability.

We are a clinical stage biopharmaceutical company with a limited operating history. We were incorporated in February 2019 and our operations to date have been limited to organizing and staffing our company, business planning, raising capital, licensing key intellectual property rights, conducting research and development of our product candidates ourselves and with collaborators, collaborating on scale-up of product candidate manufacturing, establishing cold chain delivery logistics and preparing for and conducting our ongoing and planned preclinical studies and clinical trials.

AlloNK, our lead product candidate, is in early clinical development and our other product candidates and programs are in preclinical development or discovery stages. We have not yet demonstrated an ability to successfully complete a clinical program, including large-scale, pivotal clinical trials, obtaining marketing approval, manufacturing product at a commercial scale, or arranging for a third party to do so on our behalf, or conducting sales and marketing activities necessary for successful product commercialization. This may make it difficult to evaluate the success of our business to date and assess our future viability.

We expect to incur significant losses for the foreseeable future and may never achieve or maintain profitability.

Investment in biopharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and the significant risk that product candidates will fail to demonstrate adequate efficacy or an acceptable safety profile, gain regulatory approval or become commercially viable. For the years ended December 31, 2022 and 2023, our comprehensive net losses were \$58.8 million and \$28.4 million, respectively. For the three months ended March 31, 2023 and 2024, our net losses were \$16.7 million and \$14.0 million, respectively. As of March 31, 2024, we had an accumulated deficit of \$195.3 million. Substantially all of our losses have resulted from expenses incurred in connection with our research and development programs and from general and administrative costs associated with our operations.

We expect to continue to incur significant expenses and additional operating losses for the foreseeable future as we seek to advance our product candidates through preclinical and clinical development, expand our research and development activities, develop new product candidates, complete clinical trials, seek regulatory approval and, if we receive regulatory approval, commercialize our products. Furthermore, the costs of advancing product candidates into each succeeding clinical phase tend to increase substantially over time. The total costs to advance any of our product candidates to marketing approval in even a single jurisdiction would be substantial. Because of the numerous risks and uncertainties associated with cell therapy product development, we are unable to accurately predict the timing or amount of increased expenses or when, or if, we will be able to generate any revenue from the commercialization of any approved products or achieve or maintain profitability. Our expenses will also increase substantially as we operate as a public company and add clinical, scientific, operational, financial and management information systems and personnel, including personnel to support our product development and planned future commercialization efforts.

Before we generate any revenue from product sales, each of our product candidates will require additional preclinical and/or clinical development, potential regulatory approval in multiple jurisdictions, manufacturing, building of a

[Table of Contents](#)

commercial organization, substantial investment and significant marketing efforts. Our expenses could increase beyond expectations if we are required by the FDA, the European Medicines Agency (EMA), the competent authorities of individual EU Member States or comparable foreign regulatory authorities to perform preclinical studies and clinical trials in addition to those that we currently anticipate, and/or to modify any of our manufacturing processes or make other changes to our product candidates or development programs. As a result, we expect to continue to incur net losses and negative cash flows for the foreseeable future. These net losses and negative cash flows have had, and will continue to have, an adverse effect on our stockholders' equity and working capital.

As we continue to build our business, we expect our financial condition and operating results may fluctuate significantly from quarter to quarter and year to year due to a variety of factors, many of which are beyond our control. Accordingly, you should not rely upon the results of any particular quarterly or annual period as indications of future operating performance. If we are unable to develop and commercialize one or more of our product candidates either alone or with collaborators, or if revenues from any product candidate that receives marketing approval are insufficient, we will not achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability. If we are unable to achieve and then maintain profitability, the value of our securities will be adversely affected.

Even if this offering is successful, we will need to obtain substantial additional funding to complete the development and any commercialization of our current and any future product candidates, which may cause dilution to our stockholders. If we are unable to raise this capital when needed, we may be forced to delay, reduce or eliminate our research and development programs or other operations.

The development of biopharmaceutical product candidates is capital-intensive. We expect to spend substantial amounts to advance our product candidates into clinical development and to complete the clinical development of, seek regulatory approvals for and commercialize our product candidates, if approved. We will require additional capital beyond the proceeds of this offering, which we may raise through public or private equity or debt financings or other capital sources, which may include strategic collaborations and other strategic arrangements with third parties, to enable us to complete the development and potential commercialization of our product candidates. Furthermore, upon the closing of this offering, we expect to incur additional costs associated with operating as a public company. Adequate additional financing may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed would have a negative effect on our financial condition and our ability to pursue our business strategy. In addition, attempting to secure additional financing may divert the time and attention of our management from day-to-day activities and harm our development efforts. If we are unable to raise capital when needed or on acceptable terms, we would be forced to delay, reduce or eliminate certain of our research and development programs.

Our operations have consumed significant amounts of cash since inception. As of March 31, 2024, our cash, cash equivalents and short-term investments were \$62.1 million. Based on our planned use of the net proceeds of this offering and our current cash, cash equivalents and short-term investments, we estimate that our funds will be sufficient to enable us to fund our operating expenses and capital expenditure requirements

. This estimate is based on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Changing circumstances could cause us to consume capital significantly faster than we currently anticipate, and we may need to spend more than currently expected because of circumstances beyond our control. Because the length of time and activities associated with successful development of our product candidates is highly uncertain, we are unable to estimate the actual funds we will require for development and any marketing and commercialization activities.

Our future funding requirements, both near and long-term, will depend on many factors, including, but not limited to:

- the type, number, scope, progress, expansions, results, costs and timing of, discovery, preclinical studies and clinical trials of our current and future product candidates, including AlloNK, AB-201 and AB-205;
- the costs and timing of manufacturing for our product candidates, including continuing to develop our own manufacturing capabilities;

[Table of Contents](#)

- the outcome, timing and cost of meeting regulatory requirements established by the FDA and comparable foreign regulatory authorities;
- the cost of obtaining, maintaining and protecting our intellectual property portfolio, including filing, prosecuting, defending and enforcing our patent claims and other intellectual property rights;
- the cost of establishing a sales, marketing and distribution infrastructure to commercialize any product candidates for which we may obtain marketing approval;
- the cost and timing of completion of commercial-scale manufacturing activities;
- the cost of making royalty, milestone or other payments under current and any future in-license agreements;
- the timing and amount of the milestone or other payments made to us under our current or any future collaboration agreements;
- costs associated with growing our workforce and retaining and motivating our employees;
- the initiation, progress, timing and results of our commercialization of our product candidates, if approved for commercial sale;
- costs associated with any products or technologies that we may in-license or acquire;
- the costs associated with being a public company; and
- our implementation of additional internal systems and infrastructure, including operational, financial and management information systems.

In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect your rights as a holder of common stock. Debt financing and preferred equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaborations, strategic alliances or marketing, distribution or licensing arrangements with third parties, we may be required to relinquish valuable rights to our technologies, future revenue streams, research programs or product candidates or grant licenses on terms that may not be favorable to us. If we are unable to raise additional funds through equity or debt financings when needed, we may be required to delay, limit, reduce or terminate our product development or future commercialization efforts or grant rights to develop and market product candidates that we would otherwise prefer to develop and market ourselves.

Our financial statements contain disclosure regarding the substantial doubt about our ability to continue as a going concern. We will need additional financing to execute our business plan, to fund our operations and to continue as a going concern.

Based on our expected operating losses and negative cash flows, there is substantial doubt about our ability to continue as a going concern for the 12 months following the issuance of our audited financial statements. If we are unable to successfully complete this offering or raise sufficient capital when needed, our business, financial condition and results of operations will be materially and adversely affected, and we will need to significantly modify our operational plans to continue as a going concern. If we are unable to continue as a going concern, we may have to liquidate our assets and the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our financial statements. The inclusion of a going concern explanatory paragraph by our auditors, our lack of cash resources and our potential inability to continue as a going concern may materially adversely affect our share price and our ability to raise new capital or to enter into critical contractual relations with third parties.

Risks Related to the Discovery and Development of our Product Candidates

Our approach to the development of NK cell-based product candidates is unproven, and we do not know whether we will be able to develop any products of commercial value, or if competing technological approaches will limit the commercial value of our product candidates or render our platform obsolete.

Our success depends on our ability to develop, obtain regulatory approval for and commercialize our product candidates utilizing our NK cell therapy platform, including manufacturing capabilities, which leverages relatively

[Table of Contents](#)

novel technologies. While we have had favorable preclinical and early clinical study results based on our platform, we are early in our development efforts and may not succeed in demonstrating efficacy and safety for any product candidates in clinical trials or in obtaining marketing approval thereafter. Our understanding of NK cell biology is continuously evolving and this is particularly true in relation to autoimmune diseases where there is limited clinical data available. In particular, our approach in developing treatments for autoimmune diseases with NK cell-based therapies is novel and we have limited experience in doing so as our resources and processes have historically been focused on the development of NK cell-based therapies for cancer. We may also experience timeline delays or serious adverse events, and our product candidates may never become commercialized. All of our product candidates will require significant additional clinical and non-clinical development, review and approval by the FDA or comparable foreign regulatory authorities in one or more jurisdictions, substantial investment, and significant marketing efforts before they can be successfully commercialized. Our methodology and novel approach to cellular therapy may be unsuccessful in identifying additional product candidates, and any product candidates based on our platform may be shown to have harmful side effects or may have other characteristics that may necessitate additional clinical testing, or make the product candidates unmarketable or unlikely to receive marketing approval. Further, because all of our product candidates and development programs are based on our NK cell therapy platform, adverse developments with respect to one of our programs may have a significant adverse impact on the actual or perceived likelihood of success and value of our other programs. For example, if our clinical trials of AlloNK encounter safety, efficacy or manufacturing problems, development delays, regulatory issues or other problems, our development plans for our other product candidates in our pipeline could be significantly impaired.

The FDA has cautioned consumers about potential safety risks associated with T-cell therapies. The FDA has approved only a few cell-based therapies for commercialization and to our knowledge, no NK cell-based therapy has been approved for commercial use by any regulatory authority. Additionally, human primary cells are subject to donor-to-donor variability, which can make standardization more difficult. Understanding and addressing variability in the quality of a donor's cells, could ultimately affect our ability to produce product in a reliable and consistent manner and treat certain patients. As a result, the development and commercialization pathway for our product candidates may be subject to increased uncertainty, as compared to the pathway for new conventional drugs.

In addition, the biopharmaceutical industry is characterized by rapidly advancing technologies. Our future success will depend in part on our ability to maintain a competitive position with our NK cell-based approach. If we fail to stay at the forefront of technological change in utilizing our platform to create and develop product candidates, we may be unable to compete effectively. Our competitors may render our approach obsolete, or limit the commercial value of our product candidates, by advances in existing technological approaches or the development of new or different approaches, potentially eliminating the advantages in our manufacturing process that we believe we derive from our platform. By contrast, adverse developments with respect to other companies that attempt to use a similar approach to our approach may adversely impact the actual or perceived value of our platform and potential of our product candidates.

There is currently no cell therapy approved in the United States or elsewhere in the world for the treatment of any autoimmune disease, and our research and development activities related to AlloNK for treatment of autoimmune diseases, such as LN, may never lead to an approved product.

We are evaluating AlloNK in combination with B-cell targeted mAbs to treat autoimmune diseases, such as LN. There is currently no cell therapy approved in the United States or elsewhere in the world for the treatment of any autoimmune disease. We cannot be certain that our approach will lead to the development of an approvable or marketable product. We may not succeed in demonstrating safety and efficacy of AlloNK in combination with B-cell targeted mAbs for the treatment of autoimmune diseases in our ongoing or anticipated clinical trials or in larger-scale clinical trials. Advancing AlloNK in development creates significant challenges for us, including:

- obtaining marketing approval, as the FDA and other comparable foreign regulatory authorities have yet to approve a cell therapy for the treatment of any autoimmune disease;
- if AlloNK in combination with a B-cell targeted mAb is approved, educating medical personnel regarding the potential efficacy and safety benefits, as well as the challenges, of incorporating our product into their clinical practice; and

[Table of Contents](#)

- establishing the sales and marketing capabilities upon obtaining any marketing approvals to gain market acceptance.

Our product candidates are based on novel technologies, which makes it difficult to predict the time and cost of developing product candidates and obtaining regulatory approval for any product candidates that we develop.

The clinical trial requirements of the FDA and comparable foreign regulatory authorities and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use and market of the potential products. The regulatory approval process for product candidates such as ours can be more expensive and take longer than for other, better known, or more extensively studied pharmaceutical or other product candidates.

Regulatory requirements in the United States and in other countries governing cell therapy products are evolving and the FDA or comparable foreign regulatory authorities may change the requirements, or identify different regulatory pathways, for approval for any of our product candidates. For example, within the FDA, the Center for Biologics Evaluation and Research (CBER) restructured and created a new Office of Tissues and Advanced Therapies to better align its oversight activities with FDA Centers for Drugs and Medical Devices. It is possible that over time new or different divisions may be established or be granted the responsibility for regulating cell therapy products, including NK cell-based products, such as ours. As a result, we may be required to change our regulatory strategy or to modify our applications for regulatory approval, which could delay and impair our ability to complete the preclinical and clinical development and manufacture of, and obtain regulatory approval for, our product candidates. Changes in FDA or comparable foreign regulatory authorities and advisory groups, or any new requirements or guidelines they promulgate, may lengthen the regulatory review process, require us to perform additional studies, increase our development and manufacturing costs, lead to changes in regulatory pathways, positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions.

We have concentrated our research and development efforts on utilizing NK cell-based therapies. To date, the FDA has approved only a few cell-based therapies for commercialization and no NK cell-based therapy has been approved for commercial use by any regulatory authority. The processes and requirements imposed by the FDA or comparable foreign regulatory authorities may cause delays and additional costs in obtaining approvals for marketing authorization for our product candidates. Because our platform is novel, and cell-based therapies are relatively new, especially as potential treatments for autoimmune diseases, regulatory authorities may lack experience in evaluating product candidates like our product candidates. This novelty may lengthen the regulatory review process, including the time it takes for the FDA or comparable foreign regulatory authorities to review our INDs or comparable foreign applications if and when submitted, increase our development costs and delay or prevent commercialization of our product candidates. Additionally, advancing novel immune-oncology therapies creates significant challenges for us, including:

- educating medical personnel regarding the potential side-effect profile of our product candidates and, as the clinical program progresses, on observed side effects with the product candidates;
- training medical personnel;
- enrolling sufficient numbers of patients in clinical trials; and
- continuing to develop a manufacturing process to support the clinical testing of our product candidates.

We must be able to overcome these challenges in order for us to develop, commercialize and manufacture our product candidates.

As we advance our product candidates, we will be required to consult with the FDA and comparable foreign regulatory authorities and our product candidates will likely be reviewed by an FDA advisory committee. We also must comply with applicable requirements, and if we fail to do so, we may be required to delay or discontinue development of our product candidates. Delays or unexpected costs in obtaining, or the failure to obtain, the regulatory approval necessary to bring a potential product to market could impair our ability to generate sufficient product revenues to maintain our business.

In addition, either advances or adverse developments in preclinical studies or clinical trials conducted by others in the field of cell therapy products, and cellular immunotherapies in particular, may cause the FDA and comparable

[Table of Contents](#)

foreign regulatory authorities to revise the requirements for approval of any product candidates we may develop, and may otherwise negatively affect our ability to develop and commercialize our product candidates.

The regulatory review committees and advisory groups described above and the new guidelines they promulgate may lengthen the regulatory review process, require us to perform additional preclinical studies or clinical trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of these treatment candidates, or lead to significant post-approval limitations or restrictions. As we advance our research programs and develop future product candidates, we will be required to consult with these regulatory and advisory groups and to comply with applicable guidelines. If we fail to do so, we may be required to delay or discontinue development of any product candidates we identify and develop.

We are early in our development efforts and are substantially dependent on the success of our lead product candidate, AlloNK, which is in early clinical development. Although we have other product candidates in our pipeline being developed by our partners, all of our other internally developed product candidates are in the preclinical or discovery stage. If we are unable to advance our product candidates in clinical development, obtain regulatory approval and ultimately commercialize our product candidates, or experience significant delays in doing so, our business will be materially harmed.

We are in the early stages of our development efforts and are substantially dependent on the success of our lead product candidate, AlloNK, which is in early clinical development. Although we have other product candidates in our pipeline being developed by our partners, all of our other internally developed product candidates are still in the preclinical or discovery stages. We have not yet completed any clinical trials for any product candidate. We will need to progress AlloNK through our recently initiated trial and progress our other early product candidates through preclinical studies and submit INDs to the FDA or comparable foreign regulatory applications to applicable foreign regulatory authorities prior to initiating clinical trials.

Our ability to generate product revenues, which we do not expect will occur for many years, if ever, will depend heavily on the successful development and eventual commercialization of our product candidates. The success of our product candidates will depend on several factors, including the following:

- successful enrollment in, and completion of, clinical trials with favorable results;
- completion of preclinical studies with favorable results;
- sufficiency of our financial and other resources to complete the necessary preclinical studies and clinical trials;
- allowance to proceed with clinical trials under INDs by the FDA or under similar regulatory submissions by applicable foreign regulatory authorities for the conduct of clinical trials of our product candidates and our proposed design of future clinical trials;
- demonstrating the safety and efficacy of our product candidates to the satisfaction of the FDA and other applicable foreign regulatory authorities;
- receipt of regulatory approvals from applicable regulatory authorities, including new drug applications (NDAs) from the FDA and approvals from comparable foreign regulatory authorities and maintaining such approvals;
- making arrangements with third-party manufacturers, or manufacturing sufficient quantities of product candidates for clinical and commercial use using our own facilities;
- establishing sales, marketing and distribution capabilities and launching commercial sales of our products, if and when approved, whether alone or in collaboration with others;
- establishing and maintaining patent and trade secret protection or regulatory exclusivity for our product candidates;
- acceptance of any products we develop and their benefits and uses, if and when approved, by patients, the medical community and third-party payors;
- effectively competing with other therapies;
- obtaining and maintaining healthcare coverage and adequate reimbursement from third-party payors;
- maintaining an acceptable safety profile of our products following approval; and
- building and maintaining an organization of people who can successfully develop our product candidates.

[Table of Contents](#)

We have not yet succeeded and may not succeed in demonstrating efficacy and safety for any product candidates in clinical trials or in obtaining marketing approval thereafter. Given our early stage of development, it will take several years before we can demonstrate the safety and efficacy of a product candidate sufficient to warrant approval for commercialization, if we can do so at all. If we are unable to develop, or obtain marketing approval for, or, if approved, successfully commercialize our product candidates, we may not be able to generate sufficient revenue to continue our business.

Current clinical data regarding the efficacy of NK cell therapies against autoimmune diseases are limited, raising uncertainties about the therapeutic benefits of treatments like AlloNK for conditions such as LN and other autoimmune diseases. Moreover, these therapies may not prove to be competitive compared to existing treatments for autoimmune diseases.

While we believe in the potential of our allogeneic NK cell-based product candidate, AlloNK, in combination with a B-cell targeted mAb may have a clinical benefit for autoimmune diseases, such as LN, the use of NK cell-based therapies in combination with mAbs represents a novel approach for the treatment of autoimmune disease, and is supported by limited clinical data. To date, the FDA has not approved any cell therapies for autoimmune diseases, adding to the uncertainty surrounding our ongoing Phase 1/1b clinical trial of AlloNK in combination with rituximab or obinutuzumab in patients with class III or class IV LN who previously failed treatment and potential future developments for autoimmune diseases.

Our belief that AlloNK may be effective as a treatment for autoimmune disease is based on our interpretation of positive clinical data from academic groups using autologous auto-CAR-T in a limited autoimmune disease patient cohort, as well as our own preliminary data from our ongoing Phase 1/2 clinical trial of AlloNK in combination with rituximab in patients with relapsed or refractory B-NHL, which demonstrated complete responses in B-NHL patients as measured by imaging of tumor lesions. We have made certain assumptions regarding the approach responsible for the preliminary activity shown in the reported studies and how that approach and our own preliminary data from our Phase 1/2 clinical trial in patients with aggressive B-NHL will translate to patients with autoimmune diseases, such as LN, which may not be correct.

We cannot be certain whether AlloNK in combination with a B-cell targeted mAb will effectively treat LN, other manifestations of SLE, or any autoimmune disease for that matter, nor can we guarantee its competitiveness against auto-CAR-T. Additionally, we face competition from numerous cell therapy companies with strong oncology backgrounds, all pursuing development programs in autoimmune diseases, which could hinder our efforts to successfully develop and commercialize AlloNK in combination with a B-cell targeted mAb.

If our clinical trials reveal insufficient activity of AlloNK in combination with a B-cell targeted mAb against autoimmune diseases, such as LN, encounter delays in advancing AlloNK through clinical development, or if we struggle to compete with other companies in developing and marketing AlloNK in combination with a B-cell targeted mAb, it would significantly impact the commercial prospects of AlloNK, as well as our business, financial condition and growth outlook.

We are developing, and in the future may develop, other product candidates in combination with other therapies, which exposes us to additional risks.

We are developing AlloNK for combination with approved B-cell targeted mAbs. For example, our ongoing Phase 1/2 clinical study is administering AlloNK in combination with rituximab in patients with relapsed or refractory B-NHL. Beyond rituximab and other anti-CD20 mAbs, we have already conducted numerous preclinical studies in which we have shown cytotoxic activity of AlloNK in combination with other approved B-cell targeted mAb therapies, such as anti-CD19 and anti-CD38 mAbs. Even if any product candidate we develop were to receive marketing approval or be commercialized for use in combination with other existing therapies, we would continue to be subject to the risks that the FDA or comparable foreign regulatory authorities could revoke approval of the therapy used in combination with our product candidate. There is also a risk that safety, efficacy, manufacturing or supply issues could arise with these other existing therapies. For example, the other therapies may lead to toxicities that are improperly attributed to our product candidates or the combination of our product candidates with other therapies may result in negative or inconclusive results that the product candidate or other therapy does not produce when used alone or in combination with a different therapy. This could result in our own products being removed from the market or being less successful commercially. Additionally, the results observed in combinations of any of our product candidates with another therapy may not be predictive of future results of combinations of our product candidates in other combinations or indications.

[Table of Contents](#)

We may also evaluate our future product candidates in combination with one or more other therapies that have not yet been approved for marketing by the FDA or comparable foreign regulatory authorities. We will not be able to market any product candidate we develop in combination with any such unapproved therapies that do not ultimately obtain marketing approval.

If the FDA or comparable foreign regulatory authorities do not approve these other drugs or revoke their approval of, or if safety, efficacy, manufacturing or supply issues arise with, the drugs we choose to evaluate in combination with any product candidate we develop, we may be unable to obtain approval.

Interim, topline and preliminary data from our preclinical studies or clinical trials that we announce or publish from time to time may not be predictive of future results and may change as more patient data become available and are subject to audit and verification procedures, which could result in material changes to the final data.

From time to time, we may publicly disclose interim, topline or preliminary data from our preclinical studies, clinical trials or planned clinical trials, which is based on a preliminary analysis of then-available data. The results and related findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. We also make assumptions, estimations, calculations and conclusions as part of our analyses of data, and we may not have received or had the opportunity to fully and carefully evaluate all data. As a result, the interim, topline or preliminary results that we report may differ from future results of the same studies, or different conclusions or considerations may qualify such results, once additional data have been received and fully evaluated. Interim, topline and preliminary data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, such data should be viewed with caution until the final data are available. From time to time, we may also disclose interim data from our clinical trials. Interim, topline, or preliminary data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Adverse differences between interim, topline or preliminary data and final data could significantly harm our business prospects.

Further, others, including regulatory authorities, may not accept or agree with our assumptions, estimates, calculations, conclusions or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular product candidate or product and our company in general. In addition, the information we choose to publicly disclose regarding a particular study or clinical trial is based on what is typically extensive information, and you or others may not agree with what we determine is the material or otherwise appropriate information to include in our disclosure, and any information we determine not to disclose may ultimately be deemed significant with respect to future decisions, conclusions, views, activities or otherwise regarding a particular product, product candidate or our business. If the interim, topline or preliminary data that we report differ from actual results, or if others including comparable foreign regulatory authorities, disagree with the conclusions reached, our ability to obtain approval for, and commercialize, our product candidates may be harmed, which could harm our business, operating results, prospects or financial condition.

Moreover, results from previous preclinical studies or clinical trials are not necessarily predictive of future clinical trial results, and interim results of a clinical trial are not necessarily indicative of final results. Our product candidates may fail to show the desired safety and efficacy in clinical development despite positive results in preclinical studies of our product candidates or having successfully advanced through initial clinical trials.

Clinical trials are expensive, time-consuming, difficult to design and implement, and have an uncertain outcome. Further, we may encounter substantial delays in our clinical trials.

The clinical trials and manufacturing of our product candidates are subject to extensive and rigorous review and regulation by numerous government authorities in the United States and in other countries where we intend to test and market our product candidates. Before obtaining regulatory approvals for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex and expensive preclinical testing and clinical trials that our product candidates are both safe and effective for use in each target indication. In particular, because our product candidates are subject to regulation as biological drug products, we will need to demonstrate that they are safe, pure and potent for use in their target indications. Each product candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use.

[Table of Contents](#)

Clinical testing is expensive and takes many years to complete, and is subject to uncertainty. Our planned clinical trials may not be conducted as planned or completed on schedule, if at all. Delays and failures can occur at any time during the clinical trial process. Even if our future clinical trials are completed as planned, their results may not support the safety and effectiveness of our product candidates for their targeted indications or support continued clinical development of such product candidates. Our future clinical trial results may not be successful.

In addition, even if our planned trials are successfully completed, the FDA or comparable foreign regulatory authorities may not interpret the results as we do, and more trials could be required before we submit our product candidates for approval. To the extent that the results of the trials are not satisfactory to the FDA or comparable foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates.

To date, we have not completed any clinical trials required for the approval of our product candidates. We may experience delays in conducting any clinical trials, and we do not know whether our clinical trials will begin on time, will need to be redesigned, will recruit and enroll patients on time or have data readouts or be completed on schedule, or at all. Events that may prevent successful or timely commencement, readouts, and completion of clinical development and preclinical studies include:

- inability to generate sufficient preclinical, toxicology, or other in vivo or in vitro data to support the initiation of clinical trials;
- delays in sufficiently developing, characterizing or controlling a manufacturing process suitable for advanced clinical trials, or failure to do so;
- delays in reaching agreement with the FDA, or other comparable foreign regulatory authorities as to the design or implementation of our clinical trials, or failure to do so;
- delays in or failure to obtain regulatory approval to commence a clinical trial;
- delays in or failure to reach an agreement on acceptable terms with clinical trial sites or prospective contract research organizations (CROs) the terms of which can be subject to extensive negotiation and may vary significantly among different clinical trial sites;
- delays in or failure to obtain institutional review board (IRB) approval or positive ethics committee opinion at each site;
- delays in or failure to recruit suitable patients to participate in a clinical trial;
- delays in or failure to develop and validate the companion diagnostic to be used in a clinical trial, if applicable;
- delays in or failure to have patients complete a clinical trial or return for post-treatment follow-up;
- clinical sites, CROs or other third parties deviating from trial protocol or dropping out of a trial;
- failure to perform in accordance with the FDA's good clinical practice (GCP) requirements, or applicable regulatory guidelines in other countries;
- the serious, life-threatening diseases of the patients enrolled in our clinical trials, who may die or suffer adverse medical events during the course of the trials for reasons that may not be related to our product candidates;
- failure in addressing patient safety concerns that arise during the course of a trial, including occurrence of adverse events associated with the product candidate that are viewed to outweigh its potential benefits;
- failure to add a sufficient number of clinical trial sites; or
- failure to manufacture sufficient quantities of product candidate for use in clinical trials.

We may experience numerous unforeseen events during, or as a result of, clinical trials that could delay or prevent our ability to receive marketing approval or commercialize our product candidates or significantly increase the cost of such trials, including:

- we may experience changes in regulatory requirements or guidance, or receive feedback from regulatory authorities that requires us to modify the design of our clinical trials;

[Table of Contents](#)

- clinical trials of our product candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon development programs;
- the number of patients required for clinical trials of our product candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we or our investigators might have to suspend or terminate clinical trials of our product candidates for various reasons, including non-compliance with regulatory requirements, a finding that our product candidates have undesirable side effects or other unexpected characteristics, a finding that the participants are being exposed to unacceptable health risks;
- adverse events suffered by clinical trial participants that may ultimately be determined to be unrelated to our product candidates;
- the cost of clinical trials of our product candidates may be greater than we anticipate and we may elect not to cover the costs;
- the supply or quality of our product candidates or other materials necessary to conduct clinical trials of our product candidates may be insufficient or inadequate;
- regulators may revise the requirements for approving our product candidates, or such requirements may not be as we anticipate; and
- any future collaborators that conduct clinical trials may face any of the above issues, and may conduct clinical trials in ways they view as advantageous to them but that are suboptimal for us.

If we are required to conduct additional clinical trials or other testing of our product candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our product candidates or other testing, if the results of these trials or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- incur unplanned costs;
- be delayed in obtaining marketing approval for our product candidates or not obtain marketing approval at all;
- obtain marketing approval in some countries and not in others;
- obtain marketing approval for indications or patient populations that are not as broad as intended or desired;
- obtain marketing approval with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements; or
- have the product removed from the market after obtaining marketing approval.

We could encounter delays if a clinical trial is suspended or terminated by us, by the IRBs or ethics committees of the institutions in which such trials are being conducted, by the Data Safety Monitoring Board (DSMB) for such trial or by the FDA or comparable foreign regulatory authorities. These authorities may impose such a suspension or termination due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or comparable foreign regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Our lead product candidate, AlloNK, will require extensive clinical testing before we are prepared to submit a biologics license application (BLA) or marketing authorization application (MAA) for regulatory approval. We cannot predict with any certainty if or when we might complete the clinical development for our product candidates and submit a BLA or MAA for regulatory approval of any of our product candidates or whether any such BLA or MAA will be approved. We may also seek feedback from the FDA, or other comparable foreign regulatory authorities on our

[Table of Contents](#)

clinical development program, and the FDA or such other comparable foreign regulatory authorities may not provide such feedback on a timely basis, or such feedback may not be favorable, which could further delay our development programs.

We also cannot predict with any certainty whether or when we might complete a given clinical trial. If we experience delays in the commencement or completion of our clinical trials, or if we terminate a clinical trial prior to completion, the commercial prospects of our product candidates could be harmed, and our ability to generate revenues from our product candidates may be delayed. In addition, any delays in our clinical trials could increase our costs, slow down the development and approval process and jeopardize our ability to commence product sales and generate revenues. Any of these occurrences may harm our business, financial condition and results of operations. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates.

Our product candidates may cause serious adverse events or undesirable side effects or have other properties that may delay or prevent regulatory approval, cause us to suspend or discontinue clinical trials, limit the commercial profile of an approved label, or result in significant negative consequences following marketing approval, if any.

We have not yet completed any human clinical trials of our product candidates. Undesirable side effects that may be caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label than anticipated or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics.

While we believe the interim data reported to date from our Phase 1/2 B-NHL clinical trial indicate that NK cell-based therapies may have the potential to be better tolerated as compared to T cell based therapies due to biologic differences between these cell types there remains a risk of serious adverse events. In addition, historically, clinical trials using NK cell therapies in human subjects have been well-tolerated; however, it is possible that adverse events, including CRS, neurotoxicity or graft-versus-host disease will occur in human subjects during clinical trials. Furthermore, clinical trial results could reveal an unacceptable severity or incidence of other adverse events, including heart and lung problems or life-threatening infections. Any such findings could cause delays in completion or cancellation of clinical programs. Furthermore, in some instances, the diseases we may be seeking to treat may be less serious than the later stage cancers traditionally being treated with cell therapies or other immunotherapy products. Therefore, we believe the FDA and comparable foreign regulatory authorities may apply a different risk-benefit threshold to our product candidates pursuing autoimmune indications such that any potential harmful side effects that may outweigh the benefits of such product candidates would require us to cease clinical trials or abandon or limit our development of these product candidates or would cause the FDA or comparable foreign regulatory authorities to deny marketing applications for these product candidates. We believe for the FDA and other regulatory authorities may weigh adverse events in the autoimmune patient populations being pursued with cell-based therapies, such as in the LN patients in our Phase 1/1b clinical trials, may be lower than it is in oncology, and the risks of negative impact from these toxicities may therefore be higher for our autoimmune programs than for our oncology programs or the oncology programs of others.

If unacceptable side effects or deaths arise in the development of our product candidates, we, the FDA, the IRBs or ethics committees at the institutions in which our studies are conducted, DSMB or comparable foreign regulatory authorities could suspend or terminate our clinical trials or the FDA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval of our product candidates for any or all targeted indications. For example, the FDA put our Phase 1/2 clinical trial of AlloNK in combination with rituximab in patients with relapsed or refractory B-NHL on clinical hold in April 2021 due to a patient death and lifted the clinical hold in June 2021 after our investigation and amendments to the clinical trial protocol. Although there was no definitive cause of death, the autopsy findings included widespread metastatic disease and cardiovascular disease, and concluded that the death was possibly due to cardiac arrhythmia. The principal investigator determined that this serious adverse event was not related to AlloNK. We may observe undesirable side effects and we may not be able to complete a clinical trial for AlloNK or any of our other product candidates without further delays or at all. Further undesirable side effects, dose-limiting toxicity events, or deaths in clinical trials with our product candidates may cause the FDA or comparable foreign regulatory authorities to place a clinical hold on the associated clinical trials, to require additional studies, dose de-escalation, or additional protocol amendments, or otherwise to delay or deny approval of our product candidates for any or all targeted indications. Treatment-related side effects could also affect

[Table of Contents](#)

site initiation, patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff. We expect to have to train medical personnel using our product candidates to understand the side effect profiles for our clinical trials and upon any commercialization of any of our product candidates. Inadequate training in recognizing or managing the potential side effects of our product candidates could result in patient injury or death. Any of these occurrences may harm our business, financial condition and prospects significantly.

We study our product candidates in patient populations with significant comorbidities, and these patients may also receive treatment with cytotoxic lymphodepletion agents, cytokines, monoclonal antibodies and/or other treatments that may result in deaths or serious adverse or unacceptable side effects and require us to abandon or limit our clinical development activities.

Patients treated with our product candidates in clinical trials may also receive treatment with cytotoxic lymphodepletion agents, cytokines, monoclonal antibodies and/or other treatments, and may therefore experience side effects or adverse events, including death, that are unrelated to our product candidates. While these side effects or adverse events may be unrelated to our product candidates, they may still affect the success of our clinical studies. The inclusion of seriously ill patients in our autoimmune clinical trials, and critically ill patients in our oncology clinical trials may result in deaths or other adverse medical events due to underlying disease or to other therapies or medications that such patients may receive. Any of these events could prevent us from advancing our product candidates through clinical development, and from obtaining regulatory approval, and would impair our ability to commercialize our product candidates. Any inability to advance our existing product candidates or any other product candidate through clinical development would have a material adverse effect on our business, and the value of our common stock would decline.

Enrollment and retention of patients in clinical trials is an expensive and time-consuming process subject to various external factors beyond our control that may cause delays or complications.

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. We may not be able to initiate or continue clinical trials for our product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials to such trials' conclusion as required by the FDA or other comparable foreign regulatory authorities. We may experience difficulty in patient enrollment in our clinical trials for a number of reasons.

The enrollment of patients depends on many factors, including:

- the patient eligibility criteria defined in the protocol;
- the size and nature of the patient population required for analysis of the trial's endpoints;
- the proximity of patients to study sites;
- the design of the trial;
- our ability to recruit clinical trial investigators with appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied in relation to other available therapies, including new products that may be approved for the indications we are investigating;
- our ability to obtain and maintain patient consents for participation in our clinical trials; and
- the risk that patients enrolled in clinical trials will not remain in the trial through the completion of evaluation.

Competing with numerous ongoing trials and established therapies poses a challenge in recruiting patients. Our clinical trials may also compete with other clinical trials of product candidates that are in a similar cellular immunotherapy area as our product candidates, and this competition could reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Additionally, for our ongoing Phase 1/1b clinical trial of AlloNK in combination with rituximab or obinutuzumab in patients with class III or class IV LN who previously failed treatment, and any future AlloNK clinical trials for the treatment of other autoimmune diseases, the number of qualified clinical investigators is limited, so we may conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials at such clinical

[Table of Contents](#)

trial site. Recent announcements of clinical trial plans by various cell therapy companies targeting autoimmune diseases, including LN, could intensify future competition for investigators and patients. Failure to enroll a sufficient number of patients promptly could lead to delays or failure in completing our trials, hindering the development and commercialization of our product candidates within certain patient subgroups or altogether.

Our preclinical programs may experience delays or may never advance to clinical trials, which would adversely affect our ability to obtain regulatory approvals or commercialize these programs on a timely basis or at all.

In order to obtain FDA or comparable foreign regulatory authority approval to market a new biological product we must demonstrate proof of safety, purity and potency, or efficacy, in humans. To meet these requirements, we will have to conduct adequate and well-controlled clinical trials. AlloNK is our only product candidate to enter clinical development. Before we can commence clinical trials for additional product candidates, we must complete extensive preclinical testing and studies that support our planned INDs in the United States and comparable applications outside the United States.

We cannot be certain of the timely completion or outcome of our preclinical testing and studies and cannot predict if the FDA or comparable foreign regulatory authorities will accept our proposed clinical programs or if the outcome of our preclinical testing and studies will ultimately support the further development of our programs. As a result, we may not submit INDs or similar applications for our preclinical programs within our anticipated timelines, if at all, and submission of INDs or similar applications may not result in the FDA or comparable foreign regulatory authorities allowing clinical trials to begin.

Conducting preclinical testing is a lengthy, time-consuming and expensive process. The length of time may vary substantially according to the type, complexity and novelty of the program, and often can be several years or more per program. Any delays in preclinical testing and studies conducted by us or potential future partners may cause us to incur additional operating expenses. The commencement and rate of completion of preclinical studies for a product candidate may be delayed by many factors, including, for example:

- inability to generate sufficient preclinical or other in vivo or in vitro data to support the initiation of clinical trials;
- delays in reaching a consensus with regulatory authorities on study design; and
- the FDA (or comparable foreign regulatory authorities) not allowing us to rely on previous findings of safety and efficacy for other similar but approved products and published scientific literature.

Moreover, because standards for pre-clinical assessment are evolving and may change rapidly, even if we reach an agreement with the FDA on a pre-IND proposal, the FDA may not accept the IND submissions as presented, in which the clinical trial timeline could be delayed.

We may not identify or discover other product candidates and may fail to capitalize on programs or product candidates that may present a greater commercial opportunity or for which there is a greater likelihood of success.

Our business depends upon our ability to identify, develop and commercialize product candidates. A key element of our strategy is to discover and develop additional product candidates based upon our NK cell therapy platform. We are seeking to do so through our collaborations with GC Cell and Affimed, and may also explore additional strategic collaborations for the discovery of new product candidates. Research programs to identify product candidates require substantial technical, financial and human resources, whether or not any product candidates are ultimately identified. In addition, targets for different autoimmune diseases or cancers may require changes to our manufacturing processes, which may slow down development of or make it impossible to manufacture our product candidates. Our research programs may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for many reasons, including the following:

- the research methodology or technology platform used may not be successful in identifying potential product candidates;
- competitors may develop alternatives that render our product candidates obsolete or less attractive;
- we may choose to cease development if we determine that clinical results do not show promise;

[Table of Contents](#)

- product candidates we develop may nevertheless be covered by third parties' patents or other exclusive rights;
- a product candidate may be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria; and
- a product candidate may not be accepted as safe and effective by patients, the medical community or third-party payors.

Because we have limited resources, we must choose to pursue and fund the development of specific types of treatment, select certain other therapies to test in combination with our product candidates or treatment for a specific type of autoimmune disease or cancer, and we may forego or delay pursuit of opportunities with certain programs or product candidates or combinations or for indications that later prove to have greater commercial potential. Our estimates regarding the potential market for our product candidates could be inaccurate, and if we do not accurately evaluate the commercial potential for a particular product candidate, we may relinquish valuable rights to that product candidate through strategic collaboration, licensing or other arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such product candidate. Alternatively, we may allocate internal resources to a product candidate in a therapeutic area in which it would have been more advantageous to enter into a partnering arrangement.

If any of these events occur, we may be forced to abandon or delay our development efforts with respect to a particular product candidate or fail to develop a potentially successful product candidate.

Results of any patient who receives our product candidate in an IIT should not be viewed as representative of how the product candidate will perform in our clinical trials and may not be able to be used to establish safety or efficacy for regulatory approval.

Before seeking regulatory approval for any of our product candidates, we must demonstrate statistically significant evidence of both safety and effectiveness in well-controlled clinical trials. However, we do not control the design, administration, or timing of IITs. We rely on investigators and physicians to ensure their compliance with clinical and regulatory requirements when using our product candidates for these trials. Failure to comply could expose us to liability.

While IITs may provide valuable insights, their results cannot be used to establish safety or efficacy for regulatory approval. In fact, they may identify concerns that could impact our findings or ongoing trials, potentially delaying or jeopardizing regulatory approval from the FDA or other regulatory bodies. If results from IITs differ from our sponsored trials or raise concerns, regulatory authorities may question our sponsored trial results and subject them to greater scrutiny. This could result in the need for additional clinical data, delaying clinical development and approval of our product candidates.

Moreover, the patient population in such trials is at high risk for serious adverse events. If these events are attributed to our product candidates, it could negatively impact their safety profile, leading to delays or failure in obtaining regulatory approval or successfully commercializing our drug candidates. Additionally, our supply capabilities may limit patient enrollment in these trials. We may need to restructure or pause supply to enroll sufficient patients in our sponsored trials, potentially leading to adverse publicity or other disruptions.

In summary, while IITs offer valuable insights, they also pose regulatory and operational challenges that could impact our ability to bring our product candidates to market.

The affected populations for our product candidates may be smaller than we or third parties currently project, which may affect the addressable markets for our product candidates.

We select the targets for development of our product candidates based on a number of factors, including the estimated patient populations where we believe there is a meaningful addressable market opportunity. However, our projections of the number of people who have the diseases we are seeking to treat, as well as the subset of people with these diseases who have the potential to benefit from treatment with our product candidates, are estimates based on our knowledge and understanding of these diseases. The total addressable market opportunity for our product candidates will ultimately depend upon a number of factors, including the diagnosis and treatment criteria included in the final label, if approved for sale in specified indications, acceptance by the medical community, patient access, alternative therapies and product pricing and reimbursement. For example, we intend to prioritize

[Table of Contents](#)

evaluation and seeking approval for AlloNK in combination with a B-cell targeted mAb in autoimmune diseases. Incidence and prevalence estimates are frequently based on information and assumptions that are not exact and may not be appropriate, and the methodology is forward-looking and speculative. The process we have used in developing an estimated incidence and prevalence range for the indications we are targeting has involved collating limited data from multiple sources. Accordingly, the incidence and prevalence estimates included in this prospectus should be viewed with caution. Further, the data and statistical information used in this prospectus, including estimates derived from them, may differ from information and estimates made by our competitors or from current or future studies conducted by independent sources.

Disruptions at the FDA and other government agencies or comparable foreign regulatory authorities caused by funding shortages or global health concerns could hinder their ability to hire, retain or deploy key leadership and other personnel, or otherwise prevent new or modified products from being developed, cleared or approved or commercialized in a timely manner or at all, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, statutory, regulatory and policy changes, the FDA's ability to hire and retain key personnel and accept the payment of user fees, and other events that may otherwise affect the FDA's ability to perform routine functions. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of other government agencies that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Separately, in response to the COVID-19 pandemic, the FDA postponed most inspections of domestic and foreign manufacturing facilities at various points. Even though the FDA has since resumed standard inspectional operations, any resurgence of the virus or emergence of new variants may lead to further inspectional or administrative delays. If a prolonged government shutdown occurs or other public health crisis were to occur that prevented the FDA or comparable foreign regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA or comparable foreign regulatory authorities to timely review and process our regulatory submissions, which could have a material adverse effect on our business.

Risks Related to Manufacturing and Our Reliance on Third Parties

If third parties that we rely on to conduct clinical trials do not successfully carry out their contractual duties, comply with regulatory requirements or meet expected deadlines, we may not be able to obtain marketing approval for or commercialize our product candidates.

We do not independently conduct clinical trials. We rely on medical institutions, clinical investigators, contract laboratories and other third parties, such as CROs, to conduct or otherwise support clinical trials for our product candidates. In addition, for AB-201 and AB-205, our partner GC Cell will be engaging in initial clinical development outside our licensed territories to generate initial proof of concept data. We rely heavily on these parties for execution of clinical trials for our product candidates and control only certain aspects of their activities. Nevertheless, we are responsible for ensuring that each of our clinical trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards, and our reliance on CROs and other third parties will not relieve us of our regulatory responsibilities. For any violations of laws and regulations during the conduct of our clinical trials, we could be subject to untitled letters, warning letters or enforcement action that may include civil penalties up to and including criminal prosecution.

We and the third parties on which we rely for clinical trials are required to comply with regulations and requirements, including GCP for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate, and that the trial patients are adequately informed of the potential risks of participating in clinical trials and their rights are protected. These regulations are enforced by the FDA, the competent authorities of the European Union (EU) Member States, and comparable foreign regulatory authorities for any drugs in clinical development. The FDA and competent authorities of EU Member States enforces GCP requirements through periodic inspections of clinical trial sponsors, principal investigators and trial sites. If we or these third parties fail to comply with applicable GCP, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or comparable foreign regulatory authorities may require us to perform additional clinical trials before approving our marketing applications. We cannot assure you that, upon inspection, the FDA or

[Table of Contents](#)

comparable foreign regulatory authorities will determine that any of our future clinical trials will comply with GCP. In addition, our clinical trials must be conducted with product candidates produced under cGMP regulations. Our failure or the failure of these third parties to comply with these regulations may require us to repeat clinical trials, which would delay the marketing approval process and could also subject us to enforcement action. We also are required to register certain ongoing clinical trials and provide certain information, including information relating to the trial's protocol, on a government-sponsored database, ClinicalTrials.gov, within specific timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Although we intend to design the clinical trials for our product candidates, we will rely on third parties to conduct our clinical trials. As a result, many important aspects of our clinical development, including clinical trial conduct and timing, will be outside of our direct control. Our reliance on third parties to conduct future clinical trials will also result in less direct control over the management of data developed through clinical trials than would be the case if we were relying entirely upon our own staff.

Communicating with outside parties can also be challenging, potentially leading to mistakes, as well as difficulties in coordinating activities. Outside parties may:

- have staffing difficulties;
- fail to comply with contractual obligations;
- experience regulatory compliance issues;
- undergo changes in priorities or become financially distressed; or
- form relationships with other entities, some of which may be our competitors.

If third parties do not perform our clinical trials in a satisfactory manner, breach their obligations to us or fail to comply with regulatory requirements, we would be unable to rely on clinical data collected by these third parties and may be required to repeat, extend the duration of, or increase the size of any clinical trials we conduct, which could significantly delay commercialization and require significantly greater expenditures.

If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative third parties on commercially reasonable terms, or at all. If third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, if they need to be replaced or if the quality or accuracy of the clinical data they obtain are compromised due to the failure to adhere to our clinical protocols, regulatory requirements or for other reasons, any clinical trials such third parties are associated with may be extended, delayed or terminated, and we may not be able to obtain marketing approval for or successfully commercialize our product candidates. As a result, we believe that our financial results and the commercial prospects for our product candidates in the subject indication would be harmed, our costs could increase and our ability to generate revenue could be delayed.

Moreover, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA or comparable foreign regulatory authorities. The FDA or comparable foreign regulatory authority may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected the interpretation of the trial. The FDA or comparable foreign regulatory authority may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, refusal to accept or rejection, of our marketing applications by the FDA or comparable foreign regulatory authority, as the case may be, and may ultimately lead to the denial of marketing approval of our product candidates.

We may, from time to time, such as for our ongoing Phase 1/1b clinical trial for of AlloNK in combination with rituximab or obinutuzumab in patients with class III or class IV LN who previously failed treatment, establish partnerships in relation to our clinical trials, receiving advisory services and other support from third parties. Although we believe that these partnerships will enable us to accelerate the development of our product candidates and clinical trials, we cannot guarantee that such collaborations will be successful and, in the event they are not, we may lose our competitive advantage and/or incur additional costs.

Our collaboration agreements with Affimed, GC Cell and any future collaborations with third parties to develop or commercialize our product candidates, mean that our prospects with respect to the product candidates involved will depend in significant part on the success of those collaborations.

Our collaborations, including our collaborations with Affimed and GC Cell, and any future collaborations we may enter with third parties, could result in the following risks:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators could fail to conduct trials on the timeline we expect or otherwise fail to support our partnered trials;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates;
- collaborators could encounter safety or efficacy problems, manufacturing problems, developmental delays, regulatory issues or other problems with our partnered trials;
- collaborators may not properly enforce, maintain or defend our intellectual property rights or may use our proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation, or other intellectual property proceedings;
- disputes may arise between a collaborator and us that cause the delay or termination of the research, development or commercialization of the product candidate, or that result in costly litigation or arbitration that diverts management attention and resources;
- if a present or future collaborator of ours were to be involved in a business combination, the continued pursuit and emphasis on our product development or commercialization program under such collaboration could be delayed, diminished or terminated; and
- collaboration agreements may restrict our right to independently pursue new product candidates.

In addition, if conflicts arise between our collaborators and us, our collaborators may act in a manner adverse to us and could limit our ability to implement our strategies. Future collaborators may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by the collaborators or to which the collaborators have rights, may result in the withdrawal of support for our product candidates. Our collaborators may preclude us from entering into collaborations with their competitors, fail to obtain timely regulatory approvals, terminate their agreements with us prematurely or fail to devote sufficient resources to the development and commercialization of products. Any of these developments could harm our product development efforts.

As a result, if we enter into collaboration agreements and strategic partnerships or license our intellectual property, products or businesses, such as our agreements with GC Cell and Affimed, we may not be able to realize the benefit of such transactions if we are unable to successfully integrate them with our existing operations, which could delay our timelines or otherwise adversely affect our business. Following a strategic transaction or license, we may not achieve the revenue or specific net income that justifies such transaction.

We may seek to form collaborations in the future with respect to our product candidates, but may not be able to do so, which may cause us to alter our development and commercialization plans.

The advancement of our product candidates and development programs and the potential commercialization of our current and future product candidates will require substantial additional cash to fund expenses. For some of our programs, we may seek to collaborate with pharmaceutical and biotechnology companies to develop and commercialize such product candidates, such as our collaborations with Affimed. Any of these relationships may require us to incur non-recurring and other charges, increase our near and long-term expenditures, issue securities that dilute our existing stockholders, or disrupt our management and business.

We face significant competition in seeking appropriate strategic partners and the negotiation process is time-consuming and complex. Whether we reach a definitive agreement for other collaborations will depend, among other things, upon our assessment of the collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the

[Table of Contents](#)

design or results of clinical trials, the progress of our clinical trials, the likelihood of approval by the FDA or comparable foreign regulatory authorities, the potential market for the subject product candidate, the costs and complexities of manufacturing and delivering such product candidate to patients, the potential of competing products, the existence of uncertainty with respect to our ownership of technology, which can exist if there is a challenge to such ownership without regard to the merits of the challenge, and industry and market conditions generally. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for our product candidate. Further, we may not be successful in our efforts to establish a strategic partnership or other alternative arrangements for future product candidates because they may be deemed to be at too early of a stage of development for collaborative effort and third parties may not view them as having the requisite potential to demonstrate safety and efficacy. Any delays in entering into new collaborations or strategic partnership agreements related to any product candidate we develop could delay the development and commercialization of our product candidates, which would harm our business prospects, financial condition and results of operations.

The manufacture of cell therapy products is novel, complex and subject to multiple risks. We could experience manufacturing problems, and/or we could be required to or choose to modify our manufacturing processes, which could result in delays in the development or commercialization of our product candidates or otherwise harm our business.

Our product candidates utilize primary human NK cells, and the process of manufacturing such product candidates is complex, highly regulated and subject to numerous risks. As a result of these complexities, manufacturing our cellular therapy product candidates is generally more complicated than traditional small-molecule chemical compounds or biologics. In addition, our cost of goods development is at an early stage. The actual cost to manufacture and process our product candidates could be greater than we expect and could materially and adversely affect the commercial viability of our product candidates. Moreover, the manufacturing processes for certain of our existing CAR-NK cell product candidates have not been tested at full scale.

Even minor deviations from normal manufacturing processes could result in reduced production yields, product defects and other supply disruptions. If microbial, viral or other contaminations are discovered in our product candidates or in any of the manufacturing facilities in which products or other materials are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination.

We plan to make changes to our manufacturing processes for various reasons, such as to control costs, meet new or additional regulatory requirements, achieve scale, decrease processing time, increase manufacturing success rate, to facilitate the development of future product candidates or for other reasons, and we cannot be sure that even minor changes in these processes will not cause our current or future product candidates to perform differently and affect the results of our ongoing and planned clinical trials or the performance of the product once commercialized. Changes to our processes made during the course of clinical development will require us to amend our IND submission to the FDA to show the comparability of the product used in earlier clinical phases or at earlier portions of a trial to the product used in later clinical phases or later portions of the trial. Other changes to our manufacturing processes made before or after commercialization could require us to show the comparability of the resulting product to the product candidate used in the clinical trials using earlier processes. This could require us to collect additional nonclinical or clinical data from any modified process prior to obtaining marketing approval for the product candidate produced with such modified process. If such data are not ultimately comparable to that seen in the earlier trials or earlier in the same trial in terms of safety or efficacy, we may be required to make further changes to our processes and/or undertake additional clinical testing, either of which could significantly delay the clinical development or commercialization of the associated product candidate, which would materially adversely affect our business, financial condition, results of operations and growth prospects.

We may experience unforeseen events during, or as a result of, ramping up our manufacturing process that could result in delays in manufacturing sufficient quantities of our product candidates or otherwise harm our business.

We currently significantly rely on GC Cell for the manufacturing of our product candidates. While we have built our own clinical manufacturing facility and may decide to build our own commercial-scale manufacturing facility, we may encounter delays, quality or other issues if and when we begin to use our manufacturing facility for supply, and will continue to rely on GC Cell at least partially for manufacturing of our product candidates in the near term.

We currently significantly rely on GC Cell to manufacture our product candidates. If GC Cell were to breach their agreement with us or otherwise fail to perform for any reason, including due to the loss of key members of GC Cell's management or other key employees, we likely would experience delays while we identify and qualify a replacement manufacturer and we may be unable to do so on terms that are favorable to us, which may make it more difficult for us to develop our product candidates and compete effectively. We have built our own clinical manufacturing facility and may decide to build our own commercial-scale manufacturing facility, or may elect to contract with other third-party contract manufacturers. Our cGMP manufacturing center is currently fully functional pending FDA authorization to use product candidates manufactured at this facility to supply our clinical trials, but we may also encounter delays or quality or other issues as we begin to use our manufacturing facility or rely on other third-party contract manufacturers given the complexity of manufacturing cell therapies. In addition, if we cannot obtain FDA authorization to utilize product candidates manufactured from our cGMP manufacturing center on a timely basis or at all, we could experience supply constraints that could delay our clinical trials. We will continue to rely on GC Cell at least partially for manufacturing our product candidates in the near term, particularly for supply in the EU. Any disruption in the supply of our product candidates could result in delays in our clinical trials, which would materially adversely affect our business, financial condition, results of operations and growth prospects.

Our partial reliance on third parties for manufacturing increases the risk that supply of our product candidates may become limited or interrupted or may not be of satisfactory quality and quantity.

While we have built our own clinical manufacturing facility, we currently do not own or operate our own commercial-scale manufacturing facilities and outsource the manufacturing of our product candidates to third parties, including GC Cell. Moreover, while we are operating our own clinical manufacturing facility and may decide to build our own commercial-scale manufacturing facility, we currently have limited personnel with experience in drug manufacturing and currently lack the resources and the capabilities to manufacture any of our product candidates on a clinical or commercial scale. Our reliance on GC Cell and on a limited number of third-party manufacturers exposes us to the following risks:

- We may continue to depend on certain third-party manufacturers and we may be unable to identify alternative manufacturers on acceptable terms or at all because the number of potential manufacturers is limited and the FDA or comparable foreign regulatory authorities may require us to submit additional information or have questions regarding any replacement contractor. This may require new testing and regulatory interactions. In addition, a new manufacturer would have to be educated in, or develop substantially equivalent processes for, the production of our products.
- GC Cell or any future third-party manufacturer might be unable to timely formulate and manufacture our product or produce the quantity and quality required to meet our clinical and commercial needs, if any.
- GC Cell and any other contract manufacturers may not be able to execute our manufacturing procedures appropriately.
- GC Cell and any future contract manufacturers may not perform as agreed or may not remain in the contract manufacturing business for the time required to supply our clinical trials or to successfully produce, store and distribute our products.
- Manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration, corresponding state agencies and comparable foreign regulatory authorities to monitor and ensure strict compliance with cGMP and other government regulations and corresponding foreign requirements. We have limited control over third-party manufacturers' compliance with these regulations and standards. Despite our efforts to audit and verify regulatory compliance, one or more of our third-party manufacturing vendors may be found on regulatory inspection by the FDA or other comparable foreign regulatory authorities to be noncompliant with cGMP regulations.
- We may not own, or may have to share, the intellectual property rights to any improvements made by our third-party manufacturers in the manufacturing process for our products.
- GC Cell and any future third-party manufacturers could breach their agreement with us.

[Table of Contents](#)

Though we have built our own clinical manufacturing facility, we expect that we will continue to rely on third parties for various manufacturing needs.

Manufacturers of pharmaceutical products must comply with strictly enforced cGMP requirements, state and federal regulations, as well as foreign requirements when applicable. Any failure of us or our contract manufacturing organizations to adhere to or document compliance to such regulatory requirements could lead to a delay or interruption in the availability of our program materials for clinical study or enforcement action from the FDA or comparable foreign regulatory authorities. Our failure, or the failure of our third-party manufacturers, to comply with applicable regulatory requirements could result in sanctions being imposed on us, including shutdown of the third-party vendor or invalidation of drug product lots or processes, clinical holds, fines, injunctions, civil penalties, delays, suspension, variation or withdrawal of approvals, license revocation, seizures or recalls of product candidates or products, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect supplies of our product candidates, if approved, and significantly harm our business, financial condition, results of operations and prospects. Our potential future dependence upon others for the manufacture of our product candidates may also adversely affect our future profit margins and our ability to commercialize any product candidates that receive regulatory approval on a timely and competitive basis.

We are dependent on third parties to acquire, ship and store our cord blood units, NK cell master cell banks and drug product lots, viral vectors, and master and working feeder cell banks, and any disruption, quality concerns, damage or loss would cause delays in replacement and our business could suffer.

Our product candidates and certain other materials generated or used during their production, including cord blood units, viral vectors and working feeder cell banks, are acquired from and shipped by third parties and stored in freezers maintained by us and by third parties. In addition, our master cell banks are stored in freezers maintained by third parties. If there is a disruption to the supply of these materials, if available materials fail to meet quality standards, or if any of these materials are damaged while in transit or while stored at these facilities, including by the loss or malfunction of these freezers or back-up power systems, as well as by damage from fire, power loss or other natural disasters, we would need to establish replacement products, which could adversely impact our clinical supply and delay our clinical trials and preclinical studies. If we are unable to establish replacement materials in a timely fashion, we could incur significant additional expenses and potential liability to our clinical trial patients whose treatment is delayed, and our business could suffer.

Our cell therapy products depend on the availability of reagents and specialized materials and equipment, including cord blood and viral vectors, which in each case are required to be acceptable to the FDA and comparable foreign regulatory authorities, and such reagents, materials, and equipment may not be available to us on acceptable terms or at all. We and our third-party manufacturers rely on third-party suppliers for various components, materials and equipment required for the manufacture of our product candidates, some of which are single-source products, and do not have supply arrangements for certain of these components.

Manufacturing of our product candidates, including by GC Cell and certain other of our third-party manufacturers, requires many reagents and other specialty materials and equipment, including cord blood and viral vectors, some of which are sourced from sole suppliers. Reagents and other key materials from these suppliers may have inconsistent attributes and introduce variability into our manufactured product candidates, which may contribute to possible adverse events. We and our third-party manufacturers rely on the general commercial availability of materials required for the manufacture of our product candidates, and do not have supply contracts with many of these suppliers and may not be able to obtain supply contracts with them on acceptable terms or at all. Even if we or our third-party manufacturers are able to enter into such contracts, we may be limited to a sole third-party for the supply of certain required components. An inability by us or our third-party manufacturers to continue to source product from any of these suppliers, which could be due to regulatory actions or requirements affecting the supplier, adverse financial or other strategic developments experienced by a supplier, labor disputes or shortages, availability of raw materials, unexpected demands, or quality issues, could adversely affect our ability to satisfy demand for our product candidates, which could adversely and materially affect our product sales and operating results or our ability to conduct clinical trials, either of which could significantly harm our business.

If we or our third-party manufacturers are required to change suppliers, or modify the components, equipment, materials or disposables used for the manufacture of our product candidates, we may be required to change our manufacturing operations or clinical trial protocols or to provide additional data to regulatory authorities in order to

[Table of Contents](#)

use any alternative components, equipment, materials or disposables, any of which could set back, delay, or increase the costs required to complete our clinical development and commercialization of our product candidates. Additionally, any such change or modification may adversely affect the safety, efficacy, stability, or potency of our product candidates, and could adversely affect our clinical development of our product candidates and harm our business.

If our third-party suppliers use hazardous, non-hazardous, biological or other materials in a manner that causes injury or violates applicable law, we may be liable for damages.

Our research and development activities involve the controlled use of potentially hazardous substances, including chemical and biological materials. We and our suppliers are subject to federal, state and local laws and regulations in the United States and by foreign governmental authorities governing the use, manufacture, storage, handling and disposal of medical and hazardous materials. Although we believe that we and our suppliers' procedures for using, handling, storing and disposing of these materials comply with legally prescribed standards, neither we nor our suppliers can completely eliminate the risk of contamination or injury resulting from medical or hazardous materials. As a result of any such contamination or injury, we may incur liability or local, city, state or federal authorities may curtail the use of these materials and interrupt our business operations. In the event of an accident, we could be held liable for damages or penalized with fines, and the liability could exceed our resources. We do not have any insurance for liabilities arising from medical or hazardous materials. Compliance with applicable environmental laws and regulations is expensive, and current or future environmental regulations may impair our research, development and production efforts, which could harm our business, prospects, financial condition or results of operations.

Any contamination or interruption in our manufacturing process, shortages of raw materials or failure of our suppliers to deliver necessary components could result in delays in our clinical development or marketing schedules.

Given the nature of cell therapy manufacturing, there is a risk of contamination. If microbial, viral or other contaminants are discovered in our product candidates or in any of the manufacturing facilities in which products or other materials are made, such manufacturing facilities may need to be closed for an extended period of time to investigate and remedy the contamination. Any contamination could adversely affect our ability to produce product candidates on schedule and could, therefore, delay our clinical trials, harm our results of operations and cause reputational damage. Some of the raw materials required in our manufacturing process are derived from biologic sources. These raw materials are difficult to procure and may be subject to contamination or recall. A material shortage, contamination, recall or restriction on the use of biologically derived substances in the manufacture of our product candidates could adversely impact or disrupt the commercial manufacturing or the production of clinical material, which could adversely affect our development timelines and our business, financial condition, results of operations and prospects.

Risks Related to Commercialization of Our Product Candidates

We face significant competition from other biotechnology and pharmaceutical companies, and our operating results will suffer if we fail to compete effectively.

The biopharmaceutical industry in general, and the cell therapy field in particular, is characterized by rapidly advancing and changing technologies, intense competition and a strong emphasis on intellectual property. We face substantial and increasing competition from large and specialty biopharmaceutical companies, as well as public and private medical research institutions and governmental agencies. A large number of cell therapy companies with capabilities and expertise in oncology are advancing development programs in autoimmune diseases. Our known biopharmaceutical competitors developing allogeneic CAR-NK cell or CAR-T cell therapies currently include, among others, Adicet Bio, Inc., Autolus Therapeutics plc, Cabaletta Bio, Inc., Caribou Biosciences, Inc., Cartesian Therapeutics, Inc., Century Therapeutics, Inc., Fate Therapeutics, Inc., Galapagos NV, Gracell Biopharmaceuticals, Inc. (acquired by AstraZeneca), ImmPACT Bio USA, Inc., Juno Therapeutics, Inc. (acquired by BMS), Kite Pharma (acquired by Gilead), Kyverna Therapeutics, Inc., Nkarta, Inc., Novartis AG, Sana Biotechnology, Inc., Shoreline Biosciences Inc., Takeda Pharmaceuticals Company Limited and Wugen, Inc.

Our competitors will also include companies that are or will be developing other targeted therapies, including small molecule or antibodies for the same indications that we are targeting. It is also possible that new competitors, including those developing similar products or alternatives to cellular immunotherapy product candidates, may emerge and acquire significant market share.

[Table of Contents](#)

Many of our current or potential competitors have significantly greater financial, technical and human resources, as well as more expertise in research and development, manufacturing, preclinical testing, conducting clinical studies and trials and commercializing and marketing approved products. Mergers and acquisitions in the biopharmaceutical industry may result in even greater resource concentration among a smaller number of competitors.

Established pharmaceutical companies may invest heavily to accelerate discovery and development of novel compounds or to in-license novel compounds that could make our product candidates less competitive. In addition, any new product that competes with an approved product must demonstrate compelling advantages in efficacy, convenience, tolerability and safety in order to overcome price competition and to be commercially successful. Accordingly, our competitors may succeed in obtaining patent protection, discovering, developing, receiving regulatory and marketing approval for or commercializing drugs before we do, which would have an adverse impact on our business and results of operations. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large, established companies.

We currently have no marketing and sales organization and have no experience as a company in commercializing products, and we may have to invest significant resources to develop these capabilities. If we are unable to establish marketing and sales capabilities or enter into agreements with third parties to market and sell our products, we may not be able to generate product revenue.

We have no internal sales, marketing or distribution capabilities, nor have we commercialized a product. If any of our product candidates ultimately receives regulatory approval, we must build a marketing and sales organization with technical expertise and supporting distribution capabilities to commercialize each such product in major markets, which will be expensive and time consuming, or collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. We have no prior experience as a company in the marketing, sale and distribution of biopharmaceutical products and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. We may not be able to enter into collaborations or hire consultants or external service providers to assist us in sales, marketing and distribution functions on acceptable financial terms, or at all. In addition, our product revenues and our profitability, if any, may be lower if we rely on third parties for these functions than if we were to market, sell and distribute any products that we develop ourselves. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively. If we are not successful in commercializing our products, either on our own or through arrangements with one or more third parties, we may not be able to generate any future product revenue and we would incur significant additional losses.

Coverage and reimbursement may be limited or unavailable in certain market segments for our product candidates, which could make it difficult for us to sell our product candidates, if approved, profitably.

Successful sales of our product candidates, if approved, depend on the availability of coverage and adequate reimbursement from third-party payors including governmental healthcare programs, such as Medicare and Medicaid, managed care organizations and commercial payors, among others. Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In addition, because our product candidates represent new approaches to the treatment of autoimmune disease and cancer, we cannot accurately estimate the potential revenue from our product candidates. For products administered under the supervision of a physician, obtaining coverage and adequate reimbursement may also be particularly difficult because of the higher prices often associated with such drugs. Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Obtaining coverage and adequate reimbursement from third-party payors is critical to new product acceptance.

Third-party payors decide which drugs and treatments they will cover and the amount of reimbursement. Reimbursement by a third-party payor may depend upon a number of factors, including, but not limited to, the third-party payor's determination that use of a product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;

[Table of Contents](#)

- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

Obtaining coverage and reimbursement of a product from a government or other third-party payor is a time-consuming and costly process that could require us to provide to the payor supporting scientific, clinical and cost-effectiveness data for the use of our products. Even if we obtain coverage for a given product, if the resulting reimbursement rates are insufficient, hospitals may not approve our product for use in their facility or third-party payors may require co-payments that patients find unacceptably high. Patients are unlikely to use our product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of our product candidates. Separate reimbursement for the product itself may or may not be available. Instead, the hospital or administering physician may be reimbursed only for providing the treatment or procedure in which our product is used. Further, from time to time, the Centers for Medicare & Medicaid Services (CMS) revises the reimbursement systems used to reimburse healthcare providers, including the Medicare Physician Fee Schedule and Outpatient Prospective Payment System, which may result in reduced Medicare payments. In some cases, private third-party payors rely on all or portions of Medicare payment systems to determine payment rates. Changes to government healthcare programs that reduce payments under these programs may negatively impact payments from private third-party payors, and reduce the willingness of physicians to use our product candidates.

In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors. Therefore, coverage and reimbursement for products can differ significantly from payor to payor. Further, one payor's determination to provide coverage for a product does not assure that other payors will also provide coverage for the product. Additionally, any companion diagnostic test that we develop will be required to obtain coverage and reimbursement separate and apart from the coverage and reimbursement we seek for our product candidates, if approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

We intend to seek approval to market our product candidates in both the United States and in selected foreign jurisdictions. If we obtain approval in one or more foreign jurisdictions for our product candidates, we will be subject to rules and regulations in those jurisdictions. Outside the United States, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies. In some foreign countries, particularly those in Europe, the pricing of biologics is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take considerable time after obtaining marketing approval of a product candidate. The EU provides options for EU Member States to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. An EU Member State may approve a specific price for the medicinal product, it may refuse to reimburse a product at the price set by the manufacturer or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. Many EU Member States also periodically review their reimbursement procedures for medicinal products, which could have an adverse impact on reimbursement status. Moreover, in order to obtain reimbursement for our products in some European countries, including some EU Member States, we may be required to compile additional data comparing the cost-effectiveness of our products to other available therapies. This Health Technology Assessment (HTA) of medicinal products is becoming an increasingly common part of the pricing and reimbursement procedures in some EU Member States, including those representing the larger markets. The HTA process is the procedure to assess therapeutic, economic and societal impact of a given medicinal product in the national healthcare systems of the individual country. The outcome of an HTA will often influence the pricing and reimbursement status granted to these medicinal products by the competent authorities of individual EU Member States. The extent to which pricing and reimbursement decisions are influenced by the HTA of the specific medicinal product currently varies between EU Member States. The downward pressure on healthcare costs has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country. Even if a pharmaceutical product obtains a marketing authorization in the EU, there can be no assurance that reimbursement for such product will be secured on a timely basis or at all.

[Table of Contents](#)

The marketability of any product candidates for which we receive regulatory approval for commercial sale may suffer if government and other third-party payors fail to provide coverage and adequate reimbursement. We expect downward pressure on pharmaceutical pricing to continue. Further, coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any product candidate that we may develop.

The use of our product candidates in clinical trials and the sale of any products for which we obtain marketing approval exposes us to the risk of product liability claims. Product liability claims might be brought against us by consumers, healthcare professionals, pharmaceutical companies or others selling or otherwise coming into contact with our products. On occasion, large judgments have been awarded in class action lawsuits based on products that had unanticipated adverse effects. If we cannot successfully defend against product liability claims, we could incur substantial liability and costs. In addition, regardless of merit or eventual outcome, product liability claims may result in:

- impairment of our business reputation and significant negative media attention;
- withdrawal of participants from our clinical trials;
- significant costs to defend the related litigation and related litigation;
- distraction of management's attention from our primary business;
- substantial monetary awards to patients or other claimants;
- inability to commercialize our product candidates;
- product recalls, withdrawals or labeling, marketing or promotional restrictions;
- decreased demand for our product candidates, if approved for commercial sale; and
- loss of revenue.

Risks Related to Government Regulation

The regulatory approval process of the FDA and comparable foreign regulatory authorities are lengthy, time-consuming and inherently unpredictable, and even if we complete the necessary clinical trials, we cannot predict when, or if, we will obtain regulatory approval for any of our product candidates, and any such regulatory approval may be for a more narrow indication than we seek.

The research, testing, manufacturing, labeling, approval, selling, import, export, marketing, and distribution of drug products, including biologics, are subject to extensive regulation by the FDA and comparable foreign regulatory authorities in and outside the United States. We are not permitted to market any biological drug product in the United States or outside the United States until we receive approval of a BLA from the FDA or similar approvals from comparable foreign regulatory authorities. We have not previously submitted a BLA to the FDA, or similar approval filings to comparable foreign authorities. A BLA and similar applications must include extensive preclinical and clinical data and supporting information to establish the product candidate's safety and effectiveness for each desired indication. The BLA and similar applications must also include significant information regarding the chemistry, manufacturing and controls for the product, including with respect to chain of identity and chain of custody of the product.

Our product candidates could fail to receive regulatory approval from the FDA or a comparable foreign regulatory authority for many reasons, including:

- disagreement with the design or conduct of our clinical trials;
- failure to demonstrate to the satisfaction of regulatory authorities that our product candidates are safe and effective, or have a positive benefit/risk profile for its proposed indication;
- failure of clinical trials to meet the level of statistical significance required for approval;
- disagreement with our interpretation of data from preclinical studies or clinical trials;

[Table of Contents](#)

- the insufficiency of data collected from clinical trials of our product candidates to support the submission and filing of a BLA or other submission or to obtain regulatory approval;
- failure to obtain approval of our manufacturing processes or facilities of third-party manufacturers with whom we contract for clinical and commercial supplies or our own manufacturing facility; or
- changes in the approval policies or regulations that render our preclinical and clinical data insufficient for approval.

This lengthy approval process as well as the unpredictability of future clinical trial results may result in our failing to obtain regulatory approval to market our product candidates, which would significantly harm our business, results of operations and prospects. The FDA or a comparable foreign regulatory authority may require more information, including additional preclinical or clinical data to support approval, which may delay or prevent approval and our commercialization plans, or we may decide to abandon the development program. If we were to obtain approval, regulatory authorities may approve any of our product candidates for fewer or more limited indications than we request (including failing to approve the most commercially promising indications), may grant approval contingent on the performance of costly post-marketing clinical studies, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Even if our product candidates meet their safety and efficacy endpoints in clinical trials, the regulatory authorities may not complete their review processes in a timely manner, or we may not be able to obtain regulatory approval.

We expect the novel nature of our product candidates to create further challenges in obtaining regulatory approval. The FDA may also require a panel of experts, referred to as an Advisory Committee, to deliberate on the adequacy of the safety and efficacy data to support licensure. The opinion of the Advisory Committee, although not binding, may have a significant impact on our ability to obtain licensure of the product candidates based on the completed clinical trials, as the FDA often adheres to the Advisory Committee's recommendations. Similar requirements may apply outside the United States.

Similar requirements apply in the EU. The EMA has a Committee for Advanced Therapies (CAT), that is responsible for assessing the quality, safety and efficacy of advanced therapy medicinal products (ATMPs). ATMPs include gene therapy medicinal products, somatic-cell therapy medicinal products and tissue-engineered medicines. The role of the CAT is to prepare a draft opinion on an application for marketing authorization for ATMP candidates that is submitted to the EMA for subsequent review by the Committee for Medicinal Products for Human Use (CHMP). In the EU, the development and evaluation of an ATMP must be considered in the context of the relevant EU guidelines. The EMA may issue new guidelines concerning the development and marketing authorization for gene therapy medicinal products and require that we comply with these new guidelines. Similarly complex regulatory environments exist in other jurisdictions in which we might consider seeking regulatory approvals for our product candidates, further complicating the regulatory landscape.

In addition, we may experience delays or rejections based upon additional government regulation from future legislation or administrative action, or changes in regulatory authority policy during the period of product development, clinical trials and the review process. Accordingly, the regulatory approval pathway for our product candidates may be uncertain, complex, expensive and lengthy, and approval may not be obtained. For instance, the regulatory landscape related to clinical trials in the EU recently evolved. The EU Clinical Trials Regulation, (CTR), which was adopted in April 2014 and repeals the EU Clinical Trials Directive, became applicable on January 31, 2022. The CTR allows sponsors to make a single submission to both the competent authority and an ethics committee in each EU Member State, leading to a single decision for each EU Member State. The assessment procedure for the authorization of clinical trials has been harmonized as well, including a joint assessment by all EU Member States concerned, and a separate assessment by each EU Member State with respect to specific requirements related to its own territory, including ethics rules. Each EU Member State's decision is communicated to the sponsor via the centralized EU portal. Once the clinical trial approved, clinical study development may proceed. The CTR foresees a three-year transition period. The extent to which ongoing and new clinical trials will be governed by the CTR varies. For clinical trials in relation to which application for approval was made on the basis of the Clinical Trials Directive before (i) January 31, 2022, or (ii) between January 31, 2022 and January 31, 2023 and for which the sponsor has opted for the application of the Clinical Trials Directive, the Clinical Trials Directive

[Table of Contents](#)

will continue to apply on a transitional basis until January 31, 2025. By that date, all ongoing trials will become subject to the provisions of the CTR. The CTR will apply to clinical trials from an earlier date if the related clinical trial application was made on the basis of the CTR or if the clinical trial has already transitioned to the CTR framework before January 31, 2025. Compliance with the CTR requirements by us and our third-party service providers, such as CROs, may impact our developments plans.

In addition, the EU pharmaceutical legislation is currently the subject of proposals for a complete review, in the context of the Pharmaceutical Strategy for Europe initiative, launched by the European Commission in November 2020. On April 26, 2023, the European Commission adopted a proposal for a new Directive and Regulation to revise the existing pharmaceutical legislation. If adopted in the form proposed, the recent European Commission proposals to revise the existing EU laws governing authorization of medicinal products may result in a decrease in data and market exclusivity opportunities for our product candidates in the EU and make them open to generic or biosimilar competition earlier than is currently the case with a related reduction in reimbursement status. The proposed revisions remain to be agreed and adopted by the European Parliament and European Council and the proposals may therefore be substantially revised before adoption, the date of which cannot currently be anticipated. The revisions may however have a significant impact on the pharmaceutical industry and our business in the long term.

Regulatory authorities also may approve a product candidate for more limited indications than requested or they may impose significant limitations in the form of narrow indications, warnings or a risk evaluation and mitigation strategy (REMS) or comparable foreign strategies. These regulatory authorities may require labeling that includes precautions or contra-indications with respect to conditions of use, or they may grant approval subject to the performance of costly post-marketing clinical trials. In addition, regulatory authorities may not approve the labeling claims that are necessary or desirable for the successful commercialization of our product candidates. Any of the foregoing scenarios could materially harm the commercial prospects for our product candidates and materially adversely affect our business, financial condition, results of operations and prospects.

The regulatory landscape that will govern our product candidates is uncertain; regulations relating to cell therapy products are still developing, and changes in regulatory requirements could result in delays or discontinuation of development of our product candidates or unexpected costs in obtaining regulatory approval.

Because we are developing novel NK cell therapy product candidates that are unique biological entities, the regulatory requirements that we will be subject to are not entirely clear and may change. Regulatory requirements in the United States and in other countries governing cell therapy products have changed frequently and the FDA or comparable foreign regulatory authorities may change the requirements, or identify different regulatory pathways, for approval for any of our product candidates. For example, within the FDA, the CBER restructured and created a new Office of Tissues and Advanced Therapies to better align its oversight activities with FDA Centers for Drugs and Medical Devices. It is possible that over time new or different divisions may be established or be granted the responsibility for regulating cell therapy products, including NK and CAR-NK cell products such as ours. As a result, we may be required to change our regulatory strategy or to modify our applications for regulatory approval, which could delay and impair our ability to complete the preclinical and clinical development and manufacture of, and obtain regulatory approval for, our product candidates.

In addition to FDA oversight and oversight by IRBs under guidelines promulgated by the National Institutes of Health (NIH) gene therapy clinical trials are also subject to review and oversight by an institutional biosafety committee (IBC) a local institutional committee that reviews and oversees research utilizing recombinant or synthetic nucleic acid molecules at that institution. Before a clinical study can begin at any institution, that institution's IRB, and its IBC assesses the safety of the research and identifies any potential risk to public health or the environment. While the NIH guidelines are not mandatory unless the research in question is being conducted at or sponsored by institutions receiving NIH funding of recombinant or synthetic nucleic acid molecule research, many companies and other institutions not otherwise subject to the NIH guidelines voluntarily follow them. Moreover, serious adverse events or developments in clinical trials of cell therapy product candidates conducted by others may cause the FDA or comparable foreign regulatory authorities to initiate a clinical hold on our clinical trials or otherwise change the requirements for approval of any of our product candidates. Although the FDA decides whether individual gene therapy protocols may proceed, the review process and determinations of other reviewing bodies can impede or delay the initiation of a clinical trial, even if the FDA has reviewed the trial and approved its initiation. Changes in

[Table of Contents](#)

regulatory authorities and advisory groups, or any new requirements or guidelines they promulgate, may lengthen the regulatory review process, require us to perform additional studies, increase our development and manufacturing costs, lead to changes in regulatory pathways, positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. In addition, adverse developments in clinical trials of cell therapy products conducted by others may cause the FDA or comparable foreign regulatory authorities to change the requirements for approval of any of our product candidates.

These various regulatory review committees and advisory groups and new or revised guidelines that they promulgate from time to time may lengthen the regulatory review process, require us to perform additional studies, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. Even if our product candidates obtain required regulatory approvals, such approvals may later be withdrawn as a result of changes in regulations or the interpretation of regulations by applicable regulatory authorities.

Delay or failure to obtain, or unexpected costs in obtaining, the regulatory approval necessary to bring a potential product to market could decrease our ability to operate our business as planned and to generate sufficient product revenue to maintain our business.

The FDA, the EMA and other comparable foreign regulatory authorities may not accept data from trials conducted in locations outside of their jurisdiction.

We may choose to conduct international clinical trials in the future. The acceptance of study data by the FDA, the EMA or other comparable foreign regulatory authority from clinical trials conducted outside of their respective jurisdictions may be subject to certain conditions. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are applicable to the United States population and United States medical practice; (ii) the trials are performed by clinical investigators of recognized competence and pursuant to current GCP requirements; and (iii) the FDA is able to validate the data through an on-site inspection or other appropriate mean. Additionally, the FDA's clinical trial requirements, including the adequacy of the patient population studied and statistical powering, must be met. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA, the EMA or any applicable foreign regulatory authority will accept data from trials conducted outside of its applicable jurisdiction. If the FDA, the EMA or any applicable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in our product candidates not receiving approval for commercialization in the applicable jurisdiction.

We may seek orphan drug designation for some or all of our product candidates across various indications, but we may be unable to obtain such designations or to maintain the benefits associated with orphan drug designation, including market exclusivity, which may cause our revenue, if any, to be reduced.

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States when there is no reasonable expectation that the cost of developing and making available the drug or biologic in the United States will be recovered from sales in the United States for that drug or biologic. In order to obtain orphan drug designation, the request must be made before submitting a BLA. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process. In the EU a medicinal product may be designated as orphan if (1) it is intended for the diagnosis, prevention or treatment of a life threatening or chronically debilitating condition; (2) either (a) such condition affects no more than five in 10,000 persons in the EU when the application is made, or (b) the product, without the benefits derived from orphan status, would not generate sufficient return in the EU to justify investment; and (3) there exists no satisfactory method of diagnosis, prevention or treatment of such condition authorized for marketing in the EU, or if such a method exists, the product will be of significant

[Table of Contents](#)

benefit to those affected by the condition. The application for orphan designation must be submitted before the application for marketing authorization.

If a product that has orphan drug designation subsequently receives the first FDA approval of that particular product for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a BLA, to market the same drug (including biologic) for the same indication for seven years, except in limited circumstances such as a showing of clinical superiority to the product with orphan drug exclusivity or if FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. As a result, even if one of our product candidates receives orphan exclusivity, the FDA can still approve other biologics that do not have the same principal molecular structural features for use in treating the same indication or disease or the same biologic for a different indication or disease during the exclusivity period. Furthermore, the FDA can waive orphan exclusivity if we are unable to manufacture sufficient supply of our product or if a subsequent applicant demonstrates clinical superiority over our product.

In the EU, orphan designation entitles a party to financial incentives such as reduction of fees, fee waivers, protocol assistance and access to the centralized marketing authorization procedure. Moreover, upon grant of a marketing authorization and assuming the requirement for orphan designation are also met at the time the marketing authorization is granted, orphan medicinal products are entitled to a ten-year period of market exclusivity for the approved therapeutic indication. The period of exclusivity is extended by two years for orphan medicinal products that have also complied with an agreed Pediatric Investigation Plan. However, during such period, marketing authorizations may be granted to a similar medicinal product with the same orphan indication if: (i) the applicant can establish that the second medicinal product, although similar to the orphan medicinal product already authorized is safer, more effective or otherwise clinically superior to the orphan medicinal product already authorized; (ii) the marketing authorization holder for the orphan medicinal product grants its consent; or (iii) if the marketing authorization holder of the orphan medicinal product is unable to supply sufficient quantities of product. The EU exclusivity period can be reduced to six years, if, at the end of the fifth year a medicinal product no longer meets the criteria for orphan designation (i.e. the prevalence of the condition has increased above the orphan designation threshold or it is judged that the product is sufficiently profitable so as not to justify maintenance of market exclusivity).

We have received orphan drug designation for AB-201 in the United States, for the treatment of gastric and gastroesophageal junction cancer. Additionally, we may seek orphan drug designation for some or all of our product candidates in specific orphan indications in which there is a medically plausible basis for the use of these products. Even if we obtain orphan drug designation, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition, or if a subsequent applicant demonstrates clinical superiority over our products, if approved. Similar considerations may apply outside the United States. In addition, although we may seek orphan drug designation for other product candidates, we may never receive such designations. In addition, orphan drug exclusivity does not prevent the FDA or European Commission from approving competing drugs for the same or similar indication containing a different active ingredient. In addition, if a subsequent drug is approved for marketing for the same or a similar indication as any of our product candidates that receive marketing approval, we may face increased competition and lose market share regardless of orphan drug exclusivity. Orphan drug designation neither shortens the development time or regulatory review time of a drug nor gives the drug any advantage in the regulatory review or approval process.

We may seek special designations by the regulatory authorities to expedite regulatory approvals, but may not be successful in receiving these designations, and even if received, they may not benefit the development and regulatory approval process.

We may seek various designations by regulatory authorities, such as Regenerative Medicine Advanced Therapy Designation (RMAT) Breakthrough Therapy Designation, Fast Track Designation, or PRiority MEDicine (PRIME) Designation from regulatory authorities, for any product candidate that we develop. A product candidate may receive RMAT designation from the FDA if it is a regenerative medicine therapy that is intended to treat, modify, reverse or

[Table of Contents](#)

cure a serious or life-threatening condition, and preliminary clinical evidence indicates that the product candidate has the potential to address an unmet medical need for such condition. RMAT designation provides potential benefits that include more frequent meetings with FDA to discuss the development plan for the product candidate, and potential eligibility for rolling review and priority review. Products granted RMAT designation may also be eligible for accelerated approval on the basis of a surrogate or intermediate endpoint reasonably likely to predict long-term clinical benefit, or reliance upon data obtained from a meaningful number of sites, including through expansion to additional sites post-approval, if appropriate. RMAT-designated products that receive accelerated approval may, as appropriate, fulfill their post-approval requirements through the submission of clinical evidence, clinical studies, patient registries, or other sources of real world evidence (such as electronic health records); through the collection of larger confirmatory data sets; or via post-approval monitoring of all patients treated with such therapy prior to approval of the therapy.

A Breakthrough Therapy is defined by the FDA as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For product candidates that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the study can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens.

If a drug is intended for the treatment of a serious or life-threatening condition or disease, and nonclinical or clinical data demonstrate the potential to address an unmet medical need, the product may qualify for Fast Track Designation, for which sponsors must apply. The FDA has broad discretion whether or not to grant this designation. If granted, fast track designation makes a drug eligible for more frequent interactions with FDA to discuss the development plan and clinical trial design, as well as rolling review of the application, which means that the company can submit completed sections of its marketing application for review prior to completion of the entire submission. Products with Fast Track designation may also be eligible for accelerated approval and priority review, if the relevant criteria are met.

Innovative products that target an unmet medical need and are expected to be of major public health interest may be eligible for a number of expedited development and review programs, such as the PRIME scheme, which provides incentives similar to the breakthrough therapy designation in the U.S. PRIME is a voluntary scheme aimed at enhancing the EMA's support for the development of medicinal products that target unmet medical needs. Eligible products must target conditions for which there is an unmet medical need (there is no satisfactory method of diagnosis, prevention or treatment in the EU or, if there is, the new medicinal product will bring a major therapeutic advantage) and they must demonstrate the potential to address the unmet medical need by introducing new methods of therapy or improving existing ones. Benefits accrue to sponsors of product candidates with PRIME designation, including but not limited to, early and proactive regulatory dialogue with the EMA, frequent discussions on clinical trial designs and other development program elements, and potentially accelerated MAA assessment once a dossier has been submitted.

Seeking and obtaining these designations is dependent upon results of our clinical program, and we cannot guarantee whether and when we may have the data from our clinical programs to support an application to obtain any such designation. The FDA and the EMA, as applicable, have broad discretion whether or not to grant any of these designations, so even if we believe a particular product candidate is eligible for one or more of these designations, the applicable regulatory authority may determine not to grant it. We received Fast Track designation for AlloNK in combination with either rituximab or obinutuzumab to improve disease activity in patients with class III or class IV LN in February 2024. We also received Fast Track designation for AlloNK for IV infusion in combination with rituximab for the treatment of relapsed or refractory B-NHL origin to improve cancer response rates in January 2023. Fast Track designation does not guarantee an accelerated review of AlloNK or increase the likelihood that AlloNK will receive regulatory approval by the FDA. Even if we do receive the designations we may apply for, we may not experience a faster development process, review or approval compared to conventional FDA or EMA procedures, as applicable. The FDA or EU, as applicable, may rescind any granted designations if it believes that the designation is no longer supported by data from our clinical development program. Additionally, qualification for any expedited review procedure does not ensure that we will ultimately obtain regulatory approval for such product candidate.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of our product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of our product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even if the FDA grants marketing approval of a product candidate, comparable foreign regulatory authorities in foreign jurisdictions must also approve the manufacturing, marketing and promotion of the product candidate in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the United States, including additional preclinical studies or clinical trials as clinical studies conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

We may also submit marketing applications in other countries. Regulatory authorities in jurisdictions outside of the United States have requirements for approval of product candidates with which we must comply prior to marketing in those jurisdictions. Obtaining foreign regulatory approvals and compliance with foreign regulatory requirements could result in significant delays, difficulties and costs for us and could delay or prevent the introduction of our products in certain countries. If we fail to comply with the regulatory requirements in international markets and/or receive applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of our product candidates will be harmed.

Even if we receive regulatory approval of our product candidates, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.

Any regulatory approvals that we receive for our product candidates will require surveillance to monitor the safety and efficacy of the product candidate. The FDA may also require a REMS in order to approve our product candidates, which could entail requirements for a medication guide, physician communication plans or additional elements to ensure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. In addition, if the FDA or a comparable foreign regulatory authority approves our product candidates, the manufacturing processes, the availability of our product candidates to be administered in rheumatology community centers, labeling, packaging, distribution, adverse event reporting, storage, advertising, promotion, import, export and recordkeeping for our product candidates will be subject to extensive and ongoing regulatory requirements. These requirements include submissions of safety and other post-marketing information and reports, registration, as well as continued compliance with cGMPs and GCPs for any clinical trials that we conduct post-approval. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any BLA, other marketing application and previous responses to inspectional observations. Accordingly, we and others with whom we work must continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production and quality control. In addition, the FDA or comparable foreign regulatory authorities could require us to conduct another study to obtain additional safety or biomarker information.

Further, we will be required to comply with FDA and comparable foreign regulatory authorities' promotion and advertising rules, which include, among others, standards for direct-to-consumer advertising, restrictions on promoting products for uses or in patient populations that are not described in the product's approved uses (known as "off-label use"), limitations on industry-sponsored scientific and educational activities and requirements for promotional activities involving the internet and social media. Although the FDA and comparable foreign regulatory authorities do not regulate a physician's choice of drug treatment made in the physician's independent medical judgment, they do restrict promotional communications from companies or their sales force with respect to off-label uses of products for which marketing clearance has not been issued. Later discovery of previously unknown problems with our product candidates, including adverse events of unanticipated severity or frequency, or with our third-party suppliers or manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical studies to assess

new safety risks; or imposition of distribution restrictions or other restrictions under a REMS or similar foreign program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of our product candidates, withdrawal of the product from the market or voluntary or mandatory product recalls;
- fines, untitled letters, warning letters or holds on clinical trials;
- refusal by the FDA or comparable foreign regulatory authority to approve pending applications or supplements to approved applications submitted by us or suspension or revocation of license approvals;
- product seizure or detention, or refusal to permit the import or export of our product candidates; and
- injunctions or the imposition of civil or criminal penalties.

FDA and comparable foreign regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, either in the United States or abroad. For example, certain policies of the any administration may impact our business and industry. If we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval that we may have obtained and we may not achieve or sustain profitability.

Our relationships with customers, physicians, other healthcare professionals and third-party payors are subject, directly or indirectly, to federal, state, local and foreign healthcare fraud and abuse laws, false claims laws, transparency laws, health information privacy and security laws and other healthcare laws and regulations. If we or our employees, independent contractors, consultants, commercial partners and vendors violate these laws, we could face substantial penalties.

Healthcare professionals and third-party payors in the United States and elsewhere will play a primary role in the recommendation and prescription of any product candidates for which we obtain marketing approval. Our current and future arrangements with healthcare professionals, third-party payors, customers and others may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. These laws may impact, among other things, our clinical research program, as well as our proposed and future sales, marketing and education programs. In particular, the promotion, sales and marketing of healthcare items and services is subject to extensive laws and regulations designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive and other business arrangements. We may also be subject to federal, state and foreign laws governing the privacy and security of identifiable patient information. The U.S. healthcare laws and regulations that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, any person or entity from knowingly and willfully, offering, paying, soliciting or receiving any remuneration, directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, the purchasing, leasing, ordering or arranging for the purchase, lease, or order of any item or service reimbursable, in whole or in part, under Medicare, Medicaid or other federal healthcare programs. The term "remuneration" has been broadly interpreted to include anything of value. Although there are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution, the exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection. Practices that may be alleged to be intended to induce prescribing, purchases or recommendations, including any payments of more than fair market value, may be subject to scrutiny if they do not qualify for an exception or safe harbor. In addition, a person or entity does not need to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation;
- federal civil and criminal false claims laws, including the federal civil False Claims Act (FCA) and civil monetary penalties laws, which prohibit, among other things, individuals or entities from knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other federal government programs that are false or fraudulent or knowingly making a false statement to improperly avoid, decrease or conceal an obligation to pay money to the federal government, including

federal healthcare programs. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA. Private individuals, commonly known as “whistleblowers,” can bring federal civil FCA qui tam actions, on behalf of the government and such individuals and may share in amounts paid by the entity to the government in recovery or settlement;

- the federal Health Insurance Portability and Accountability Act of 1996 (HIPAA) which created new federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up by any trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statements in connection with the delivery of, or payment for, healthcare benefits, items or services. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act (HITECH), and their respective implementing regulations, which impose requirements on covered entities, including certain healthcare providers, health plans and healthcare clearinghouses, and their respective business associates that perform services for them that involve creating, receiving maintaining or transmitting protected health information (PHI) and their subcontractors that use, disclose, access, or otherwise process PHI, relating to the privacy, security and transmission of individually identifiable health information. Penalties for HIPAA violations can be significant. They vary greatly depending on the nature of violation, and could include civil monetary or criminal penalties. HIPAA also authorizes state attorneys general to file suit under HIPAA on behalf of state residents. Courts can award damages, costs and attorneys’ fees related to violations of HIPAA in such cases. While HIPAA does not create a private right of action allowing individuals to sue us in civil court for HIPAA violations, its standards have been used as the basis for a duty of care claim in state civil suits such as those for negligence or recklessness in the misuse or breach of PHI; the federal Physician Payments Sunshine Act, which requires certain manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children’s Health Insurance Program (with certain exceptions) to report annually to CMS information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician practitioners (physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists and anesthesiologist assistants, and certified nurse midwives), and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members; and
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers.

Additionally, we may be subject to state, local and foreign equivalents of each of the healthcare laws described above, among others, some of which may be broader in scope. For example, in the EU, interactions between pharmaceutical companies and healthcare professionals and healthcare organizations are also governed by strict laws, regulations, industry self-regulation codes of conduct and physicians’ codes of professional conduct both at EU level and in the individual EU Member States. The provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of pharmaceutical products is prohibited in the EU. Relationships with healthcare professionals and associations are subject to stringent anti-gift statutes and anti-bribery laws, the scope of which differs across the EU. In addition, national “Sunshine Acts” may require pharmaceutical companies to report/publish transfers of value provided to healthcare professionals and associations on a regular (e.g., annual) basis.

Also, we may be subject to the following: state and foreign anti-kickback and false claims laws that may apply to sales or marketing arrangements and claims involving healthcare items or services reimbursed by non-governmental, third-party payors, including private insurers, or that apply regardless of payor; state and foreign laws that require pharmaceutical companies to comply with the pharmaceutical industry’s voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government; state and local laws that require drug

[Table of Contents](#)

manufacturers to report information related to payments and other transfers of value to physicians and other healthcare professionals or marketing expenditures; state and foreign laws that require the reporting of information related to drug pricing; state and local laws requiring the registration of pharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health information in some circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that some of our business activities, including certain arrangements we have with physicians who are paid in the form of stock or stock options for services provided to us, could be subject to challenge under one or more of such laws. If we or our employees, independent contractors, consultants, commercial partners and vendors violate these laws, we may be subject to investigations, enforcement actions and/or significant penalties. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, disgorgement, monetary fines, imprisonment, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, additional reporting requirements and/or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

We expect the product candidates we develop will be regulated as biologics, and therefore they may be subject to competition sooner than anticipated.

The Biologics Price Competition and Innovation Act of 2009 (BPCIA) was enacted as part of the Patient Protection Affordable Care Act of 2010, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively, the Affordable Care Act), to establish an abbreviated pathway for the approval of biosimilar and interchangeable biological products. The regulatory pathway establishes legal authority for the FDA to review and approve biosimilar biologics, including the possible designation of a biosimilar as “interchangeable” based on its similarity to an approved biologic. Under the BPCIA, an application for a biosimilar product cannot be approved by the FDA until 12 years after the reference product was approved under a BLA. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation and meaning are subject to uncertainty. While it is uncertain when processes intended to implement BPCIA may be fully adopted by the FDA, any of these processes could have a material adverse effect on the future commercial prospects for our biological products.

We believe that any of the product candidates we develop that is approved in the United States as a biological product under a BLA, if any, should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider the subject product candidates to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Moreover, the extent to which a biosimilar, once approved, will be substituted for any one of the reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

In the European Union, there is a special regime for biosimilars, or biological medicinal products that are similar to a reference medicinal product but that do not meet the definition of a generic medicinal product.

For such products, the results of appropriate preclinical or clinical trials must be provided in support of an application for MA. Guidelines from the EMA detail the type of quantity of supplementary data to be provided for different types of biological product.

In addition, the approval of a biologic product biosimilar to one of our products could have a material adverse impact on our business as it may be significantly less costly to bring to market and may be priced significantly lower than our products.

Even if we obtain regulatory approval of our product candidates, the products may not gain market acceptance among physicians, patients, hospitals, rheumatology clinics, cancer treatment centers and others in the medical community.

The use of allogeneic NK cells as a potential autoimmune disease or cancer treatment may not become broadly accepted by physicians, patients, hospitals, rheumatology clinics, cancer treatment centers and others in the medical community. Factors that will influence whether our product candidates are accepted in the market include:

- the clinical indications for which our product candidates are approved;
- physicians, hospitals, rheumatology clinics, cancer treatment centers and patients considering our product candidates as a safe and effective treatment;
- the potential and perceived advantages of our product candidates over alternative treatments;
- the incidence and severity of any side effects;
- product labeling or product insert requirements of the FDA or comparable foreign regulatory authorities;
- limitations or warnings contained in the labeling approved by the FDA or comparable foreign regulatory authorities;
- the availability of our product candidates to be administered in rheumatology community centers;
- the timing of market introduction of our product candidates as well as competitive products;
- the cost of treatment in relation to alternative treatments;
- our pricing and the availability of coverage and adequate reimbursement by third-party payors, including government authorities;
- the willingness of patients to pay out-of-pocket in the absence of coverage and adequate reimbursement by third-party payors, including government authorities;
- relative convenience and ease of administration, including as compared to alternative treatments and competitive therapies; and
- the effectiveness of our sales and marketing efforts.

If our product candidates are approved but fail to achieve market acceptance among physicians, patients, hospitals, rheumatology clinics, cancer treatment centers or others in the medical community, we will not be able to generate significant revenue. Even if our products achieve market acceptance, we may not be able to maintain that market acceptance over time if new products or technologies are introduced that are more favorably received than our products, are more cost effective or render our products obsolete.

The advancement of healthcare reform may negatively impact our ability to profitably sell our product candidates, if approved.

Third-party payors, whether domestic or foreign, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the healthcare system that could impact our ability to profitably sell our product candidates, if approved. In particular, in 2010 the Affordable Care Act was enacted. The Affordable Care Act and its implementing regulations, among other things, revised the methodology by which rebates owed by manufacturers to the state and federal government for covered outpatient drugs and certain biologics, including our product candidates, under the Medicaid drug rebate program are calculated, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid drug rebate program, extended the Medicaid drug rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs, and provided incentives to programs that increase the federal government's comparative effectiveness research. Additionally, the Affordable Care Act allowed states to implement expanded eligibility criteria for Medicaid programs, imposed a new Medicare Part D coverage gap discount program, expanded the entities eligible for discounts under the Public Health Service pharmaceutical pricing program and implemented a new Patient-Centered Outcomes Research Institute.

Since its enactment, there have been executive, judicial and political challenges to certain aspects of the Affordable Care Act. For example, on June 17, 2021 the U.S. Supreme Court dismissed a challenge on procedural grounds that

[Table of Contents](#)

argued the Affordable Care Act is unconstitutional in its entirety because the “individual mandate” was repealed by Congress. Thus, the Affordable Care Act will remain in effect in its current form. It is unclear how other healthcare reform measures of the Biden administration, if any, will impact our business.

Other legislative changes have been proposed and adopted since the Affordable Care Act was enacted, including aggregate reductions to Medicare payments to providers, which went into effect beginning on April 1, 2013 and due to subsequent legislative amendments to the statute will stay in effect through 2032, unless additional Congressional action is taken. Additionally, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminated the statutory Medicaid drug rebate cap, which was previously set at 100% of a drug's average manufacturer price, for single source and innovator multiple source drugs, beginning on January 1, 2024. In addition, Congress is considering health reform measures as part of other health reform initiatives.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at broadening the availability of healthcare and containing or lowering the cost of healthcare. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products. Such reforms could have an adverse effect on anticipated revenue from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates.

In addition, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient assistance programs, and reform government program reimbursement methodologies for drugs. In July 2021, the Biden Administration released an executive order, “Promoting Competition in the American Economy,” which contained provisions relating to prescription drugs. On September 9, 2021, in response to this executive order, the U.S. Department of Health and Human Services (HHS) released a Comprehensive Plan for Addressing High Drug Prices that outlines principles for drug pricing reform and sets out a variety of potential legislative policies that Congress could pursue as well as potential administrative actions HHS can take to advance these principles. In addition, the Inflation Reduction Act of 2022 (IRA), among other things, (i) directs HHS to negotiate the price of certain high-expenditure, single-source drugs and biologics covered under Medicare, and subject drug manufacturers to civil monetary penalties and a potential excise tax by offering a price that is not equal to or less than the negotiated “maximum fair price” for such drugs and biologics under the law, and (ii) imposes rebates with respect to certain drugs and biologics covered under Medicare Part B or Medicare Part D to penalize price increases that outpace inflation. The IRA permits HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. These provisions take effect progressively starting in fiscal year 2023. On August 29, 2023, HHS announced the list of the first ten drugs that will be subject to price negotiations, although the Medicare drug price negotiation program is currently subject to legal challenges. It is unclear how the IRA will be implemented but is likely to have a significant impact on the pharmaceutical industry. In response to the Biden administration's October 2022 executive order, on February 14, 2023, HHS released a report outlining three new models for testing by the CMS Innovation Center which will be evaluated on their ability to lower the cost of drugs, promote accessibility and improve quality of care. It is unclear whether the models will be utilized in any health reform measures in the future. Further, on December 7, 2023, the Biden administration announced an initiative to control the price of prescription drugs through the use of march-in rights under the Bayh-Dole Act.

Individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures and, in some cases, designed to encourage importation from other countries and bulk purchasing.

In the EU, similar developments may affect our ability to profitably commercialize our product candidates, if approved. In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or Member State level may result in significant additional requirements or obstacles that may increase our operating costs. The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicinal products, is almost exclusively a matter for national, rather than

[Table of Contents](#)

EU, law and policy. National governments and health service providers have different priorities and approaches to the delivery of health care and the pricing and reimbursement of products in that context. In general, however, the healthcare budgetary constraints in most EU Member States have resulted in restrictions on the pricing and reimbursement of medicinal products by relevant health service providers. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market products, this could prevent or delay marketing approval of our product candidates, restrict or regulate post-approval activities and affect our ability to commercialize our product candidates, if approved. In markets outside of the United States and EU, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies.

On December 13, 2021, Regulation No 2021/2282 on HTA amending Directive 2011/24/EU, was adopted in the EU. This Regulation, which entered into force in January 2022 and will apply as of January 2025, is intended to boost cooperation among EU Member States in assessing health technologies, including new medicinal products, and providing the basis for cooperation at EU level for joint clinical assessments in these areas. The Regulation foresees a three-year transitional period and will permit EU Member States to use common HTA tools, methodologies and procedures across the EU, working together in four main areas, including joint clinical assessment of the innovative health technologies with the most potential impact for patients, joint scientific consultations whereby developers can seek advice from HTA authorities, identification of emerging health technologies to identify promising technologies early, and continuing voluntary cooperation in other areas. Individual EU Member States will continue to be responsible for assessing non-clinical (e.g., economic, social, ethical) aspects of health technologies, and making decisions on pricing and reimbursement. If we are unable to maintain favorable pricing and reimbursement status in EU Member States for product candidates that we may successfully develop and for which we may obtain regulatory approval, any anticipated revenue from and growth prospects for those products in the EU could be negatively affected.

We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for our product candidates, if we obtain regulatory approval;
- our ability to set a price that we believe is fair for our products;
- our ability to generate revenue and achieve or maintain profitability;
- the level of taxes that we are required to pay; and
- the availability of capital.

Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability.

We are subject to stringent and changing obligations related to data privacy and information security. Our actual or perceived failure to comply with such obligations could lead to regulatory investigations or actions, litigation, fines and penalties, a disruption of our business operations, reputational harm and other adverse impacts to our business and financial condition.

We process sensitive and confidential information, including certain personal information of our employees and contractors, which subjects us to various obligations related to data privacy and information security. The global data protection landscape is rapidly evolving, and we and the third parties upon which we rely (including our collaborators and third-party providers) may be or become subject to federal, state and foreign data privacy and information security laws, regulations, guidance, industry standards, external and internal privacy and security policies, contractual requirements and other obligations relating to data privacy and security, including in connection with clinical trials in the United States and abroad. The enactment of such laws could have potentially conflicting requirements that would make compliance challenging. Such laws may also be inconsistent with or restrict our collection, storage, transfer, use and disclosure of personal information and may require changes to our data processing practices and policies, including the acceptance of more onerous obligations in our contracts or additional costs, and we may be unable to make such changes and modifications in a commercially reasonable manner, or at all.

[Table of Contents](#)

In the United States, numerous federal and state laws and regulations, including HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act, or collectively, HIPAA, federal health information privacy laws, state data breach notification laws, state health information privacy laws and federal, state consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), and other similar laws govern the processing of health-related and other personal information could apply to our operations or the operations of the third parties upon which we rely. In addition, we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) which may be subject to privacy and security requirements under HIPAA. Depending on the facts and circumstances, we could be subject to significant penalties if we violate HIPAA.

In many jurisdictions, enforcement actions and consequences for noncompliance with data privacy and information security laws and regulations are rising. In the United States, these include enforcement actions in response to rules and regulations promulgated under the authority of federal agencies and state attorneys general and legislatures and consumer protection agencies. Many state legislatures have adopted legislation that regulates how businesses operate, including measures relating to data privacy and security and data breaches. For example, California enacted the California Consumer Privacy Act, as amended by the California Privacy Rights Act (collectively, the CCPA), which requires covered businesses that process the personal information of California residents to, among other things: (i) provide certain disclosures to California residents regarding the business's collection, use and disclosure of their personal information; (ii) receive and respond to requests from California residents to access, delete and correct their personal information, or to opt out of certain disclosures of their personal information; and (iii) enter into specific contractual provisions with service providers that process California resident personal information on the business's behalf. Other states have also enacted comprehensive privacy laws that impose certain obligations on covered businesses. Although there are minimum revenue thresholds for companies to be subject to some of these laws and limited exemptions for clinical trial data under the CCPA and similar state comprehensive privacy laws, such laws may impact (possibly significantly) our business activities depending on how they are interpreted, should we become subject to such laws in the future. Similar laws have passed and are being considered in several other states, as well as at the federal and local levels, and we expect more states to pass similar laws in the future. These developments may further complicate compliance efforts, and increase legal risk and compliance costs for us and the third parties upon whom we rely.

Foreign data protection laws, including the EU General Data Protection Regulation (EU GDPR) and the United Kingdom General Data Protection Regulation and Data Protection Act 2018 (UK GDPR) (collectively, the GDPR), may also apply to health-related and other personal data obtained outside of the United States and impose strict requirements for processing such data. For example, the GDPR imposes strict requirements for processing the personal data of individuals within the European Economic Area (EEA) and UK or in the context of our activities within the EEA and UK and provides for potential fines of up to the greater of €20 million under the EU GDPR, 17.5 million pounds sterling under the UK GDPR, or, in each case, 4% of annual global revenue of a noncompliant undertaking, temporary or definitive bans on processing data, or private litigation related to processing of personal data brought by classes of data subjects or consumer protection organizations authorized at law to represent their interests. Among other requirements, the GDPR regulates transfers of personal data subject to the GDPR to third countries that have not been found to provide adequate protection to such personal data, including, in certain circumstances, the United States, and the efficacy and longevity of current transfer mechanisms between the EEA and UK to the United States remains uncertain. Although there are currently various mechanisms that may be used to transfer personal data from the EEA and UK to the United States in compliance with law, such as the EEA standard contractual clauses, the UK's International Data Transfer Agreement / Addendum and the EU-U.S. Data Privacy Framework (DPF) and the UK extension thereto, these mechanisms are subject to legal challenges. If there is no lawful manner for us to transfer personal data from the EEA or other jurisdictions to the United States, or if the requirements for a legally-compliant transfer are too onerous, we could face significant adverse consequences, including the interruption or degradation of our operations, the need to relocate part of or all of our business or data processing activities to other jurisdictions (such as Europe) at significant expense, increased exposure to regulatory actions, substantial fines and penalties, the inability to transfer data and work with partners, vendors and other third parties, and injunctions against our processing or transferring of personal data necessary to operate our business. Additionally, companies that transfer personal data out of the EEA to other jurisdictions, particularly to the United States, are subject to increased scrutiny from regulators, individual litigants and activist groups. Some European

[Table of Contents](#)

regulators have ordered certain companies to suspend or permanently cease certain transfers out of Europe for allegedly violating the GDPR's cross-border data transfer limitations.

As we continue to expand into other foreign countries and jurisdictions, we may be subject to additional data privacy and security laws and regulations that may affect how we conduct business.

In addition, privacy advocates and industry groups have regularly proposed, and may propose in the future, self-regulatory standards that may legally or contractually apply to us. We are also bound by contractual obligations related to data privacy and security, and our efforts to comply with such obligations may not be successful. We publish privacy policies and other statements regarding data privacy and security. If these policies or statements are found to be deficient, lacking in transparency, deceptive, unfair, or misrepresentative of our practices, we may be subject to investigation, enforcement actions by regulators or other adverse consequences.

Obligations related to data privacy and security (and individuals' data privacy expectations) are quickly changing, becoming increasingly stringent, and creating uncertainty. Additionally, these obligations may be subject to differing applications and interpretations, which may be inconsistent or conflict among jurisdictions. Preparing for and complying with these obligations requires us to devote significant resources, which may necessitate changes to our services, information technologies, systems and practices and to those of any third parties upon which we rely.

Failure by us or the third parties upon which we rely, including our collaborators and third-party providers, to comply with U.S. and foreign data protection laws and regulations and other obligations could result in adverse consequences, including government enforcement actions (which could include civil or criminal penalties), private litigation, mass arbitration demands and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects about whom we or the third parties upon which we rely obtain information may contractually limit our ability to use and disclose such information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws or breached our contractual obligations, even if we are not found liable, could be expensive and time consuming to defend, could result in adverse publicity and could have a material adverse effect on our business, financial condition, results of operations and prospects.

Our business activities may be subject to the U.S. Foreign Corrupt Practices Act (FCPA) and similar anti-bribery and anti-corruption laws of other countries in which we operate, as well as U.S. and certain foreign export controls, trade sanctions and import laws and regulations. Compliance with these legal requirements could limit our ability to compete in foreign markets and subject us to liability if we violate them.

If we expand our operations outside of the United States, we must dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate. Our business activities may be subject to the FCPA and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which we operate. The FCPA generally prohibits companies and their employees and third party intermediaries from offering, promising, giving or authorizing the provision of anything of value, either directly or indirectly, to a non-U.S. government official in order to influence official action or otherwise obtain or retain business. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls.

Our business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, hospitals owned and operated by the government, and doctors and other hospital employees would be considered foreign officials under the FCPA. Recently the SEC and Department of Justice have increased their FCPA enforcement activities with respect to biotechnology and pharmaceutical companies. There is no certainty that all of our employees, agents or contractors, or those of our affiliates, will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers or our employees, disgorgement and other sanctions and remedial measures, and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our product in one or more countries and could materially damage our reputation, our brand, our international activities, our ability to attract and retain employees and our business.

[Table of Contents](#)

In addition, our product and activities may be subject to U.S. and foreign export controls, trade sanctions and import laws and regulations. Governmental regulation of the import or export of our product, or our failure to obtain any required import or export authorization for our product, when applicable, could harm our international sales and adversely affect our revenue. Compliance with applicable regulatory requirements regarding the export of our product may create delays in the introduction of our product in international markets or, in some cases, prevent the export of our product to some countries altogether. Furthermore, U.S. export control laws and economic sanctions prohibit the shipment of certain products and services to countries, governments and persons targeted by U.S. sanctions. If we fail to comply with export and import regulations and such economic sanctions, penalties could be imposed, including fines and/or denial of certain export privileges. Moreover, any new export or import restrictions, new legislation or shifting approaches in the enforcement or scope of existing regulations, or in the countries, persons, or product targeted by such regulations, could result in decreased use of our product by, or in our decreased ability to export our product to existing or potential customers with international operations. Any decreased use of our product or limitation on our ability to export or sell access to our product would likely significantly harm our business, financial condition, results of operations and prospects.

We are subject to various laws relating to foreign investment and the export of certain technologies, and our failure to comply with these laws or adequately monitor the compliance of our suppliers and others we do business with could subject us to substantial fines, penalties and even injunctions, the imposition of which on us could have a material adverse effect on the success of our business.

We are subject to U.S. laws that regulate foreign investments in U.S. businesses and access by foreign persons to technology developed and produced in the United States. These laws include Section 721 of the Defense Production Act of 1950, as amended by the Foreign Investment Risk Review Modernization Act of 2018, and the regulations at 31 C.F.R. Parts 800 and 801, as amended, administered by the Committee on Foreign Investment in the United States; and the Export Control Reform Act of 2018, which is being implemented in part through Commerce Department rulemakings to impose new export control restrictions on “emerging and foundational technologies” yet to be fully identified. Application of these laws, including as they are implemented through regulations being developed, may negatively impact our business in various ways, including by restricting our access to capital and markets; limiting the collaborations we may pursue; regulating the export of our products, services and technology from the United States and abroad; increasing our costs and the time necessary to obtain required authorizations and to ensure compliance; and threatening monetary fines and other penalties if we do not.

Risks Related to Our Intellectual Property

We depend substantially on intellectual property rights granted under our agreements with GC Cell. If we lose our existing licenses or are unable to acquire or license additional proprietary rights from third parties, we may not be able to continue developing our product candidates.

We are dependent on patents, know-how and proprietary technology, both our own and licensed from others. We depend substantially on our agreements with GC Cell, including the licenses granted thereunder. These licenses may be terminated upon certain conditions. Any termination of these licenses could result in the loss of significant rights and could harm our ability to commercialize our product candidates. For example, our proprietary manufacturing methods depend on technology licensed to us by GC Cell. In addition, GC Cell in-licenses some of the intellectual property rights that GC Cell has licensed to us, or that we have the ability to access under our agreements with GC Cell. To the extent these licensors fail to meet their obligations under their license agreements with GC Cell, which we are not in control of, we may lose the benefits of our license agreements with these licensors. In the future, we may also enter into additional license agreements that are material to the development of our product candidates.

We may also enter into additional agreements, including license agreements, with other parties in the future that impose diligence, development and commercialization timelines, milestone payments, royalties, insurance and other obligations on us. We are also obligated to achieve certain development milestones with respect to licensed products in our fields of use within specified time periods. If we fail to comply with our obligations to GC Cell or any of our other current or future collaborators, our counterparties may have the right to terminate these agreements, in which event we might not be able to develop, manufacture or market any product candidate that is covered by these agreements, which could adversely affect the value of the product candidate being developed under any such agreement. Termination of these agreements or reduction or elimination of our rights under these agreements may

[Table of Contents](#)

result in us having to negotiate new or reinstated agreements with less favorable terms, or cause us to lose our rights under these agreements, including our rights to important intellectual property or technology.

We may rely on third parties from whom we license proprietary technology to file and prosecute patent applications and maintain patents and otherwise protect the intellectual property we license from them. We may have limited control over these activities or any other intellectual property that may be related to our in-licensed intellectual property. For example, we cannot be certain that such activities by these licensors will be conducted in compliance with applicable laws and regulations or will result in valid and enforceable patents and other intellectual property rights. We may have limited control over the manner in which our licensors initiate an infringement proceeding against a third-party infringer of the intellectual property rights, or defend certain of the intellectual property that may be licensed to us. In addition, some of our patent rights are co-owned with GC Cell and others, and may in the future be co-owned with other third parties. We may need the cooperation of GC Cell and any future co-owners of our patent rights in order to enforce such patent rights against third parties, and such cooperation may not be provided to us. It is also possible that our licensors' or co-owners' infringement proceeding or defense activities may be less vigorous than if we conduct them ourselves. Any of the foregoing could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

The licensing and acquisition of third-party intellectual property rights is a competitive practice, and companies that may be more established, or have greater resources than we do, may also be pursuing strategies to license or acquire third-party intellectual property rights that we may consider necessary or attractive in order to commercialize our product candidates. More established companies may have a competitive advantage over us due to their larger size and cash resources or greater clinical development and commercialization capabilities. We may not be able to successfully complete such negotiations and ultimately acquire the rights to the intellectual property surrounding the additional product candidates that we may seek to acquire. Furthermore, we may be unable to in-license any compositions, methods of use, processes, or other third-party intellectual property rights from third parties, which we identify as necessary for our product candidates.

If we are unable to obtain and maintain patent protection for our technology and product candidates or if the scope of the patent protection obtained is not sufficiently broad, we may not be able to compete effectively in our markets.

We rely, and will continue to rely, upon a combination of patents, trade secret protection and confidentiality agreements to protect the intellectual property related to our proprietary manufacturing methods, proprietary technologies, product candidate development programs and product candidates. Our success depends in large part on our ability to secure and maintain patent protection in the United States and other countries with respect to our current product candidates and any future product candidates we may develop. We seek to protect our proprietary position by filing or collaborating with our licensors and co-owners to file patent applications in the United States and abroad related to our proprietary technologies, development programs and product candidates. The patent prosecution process is expensive and time-consuming, and we may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner. Moreover, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain.

Composition of matter patents for biological and pharmaceutical product candidates often provide a strong form of intellectual property protection for those types of products, as such patents provide protection without regard to any method of use. We cannot be certain that the claims in our pending patent applications directed to composition of matter of our product candidates will be considered patentable by the United States Patent and Trademark Office (USPTO) or by patent offices in foreign countries. Method of use patents protect the use of a product for the specified method. This type of patent does not prevent a competitor from making and marketing a product that is identical to our product for an indication that is outside the scope of the patented method. Method of manufacturing patents protect only the manufacturing process. This type of patent does not prevent a competitor from making and marketing a product that is identical to our product, but manufactured by a method that is outside the scope of the patented manufacturing method. Moreover, even if a competitor's manufacturing process does infringe or contribute to the infringement of method of manufacturing patents, such infringement is difficult to detect and therefore difficult to prevent or prosecute.

[Table of Contents](#)

It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. Therefore, these patents and patent applications may not be prosecuted and enforced in a manner consistent with the best interests of our business. The patent applications that we own or in-license may fail to result in issued patents with claims that cover our proprietary products and technology, including current product candidates, any future product candidates we may develop, and our NK cell therapy technology in the United States or in other foreign countries, in whole or in part. Alternately, our existing patents and any future patents we obtain may not be sufficiently broad to prevent others from using our technology or from developing competing products and technologies. It is possible that not all potentially relevant prior art relating to our patents and patent applications has been found, which can prevent a patent from issuing from a pending patent application or later invalidate or narrow the scope of an issued patent. For example, publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing or, in some cases, not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. Even if patents do successfully issue and even if such patents cover our current product candidates, any future product candidates we may develop and our NK cell therapy technology, third parties may challenge their validity, ownership, enforceability or scope thereof, which may result in such patents being narrowed, invalidated, or held unenforceable or circumvented. Any successful challenge to these patents or any other patents owned by or licensed to us could deprive us of rights necessary for the successful commercialization of any of our product candidates or gene regulation technology. In addition, the issuance of a patent does not give us the right to practice the patented invention. Third parties may have blocking patents that could prevent us from marketing our product candidate, if approved, or practicing our own patented technology. Our competitors may be able to circumvent our patents by developing similar or alternative product candidates in a non-infringing manner. Further, if we encounter delays in regulatory approvals, the period of time during which we could market a product candidate and our NK cell therapy platform under patent protection could be reduced. If any of our patents expire or are challenged, invalidated, circumvented or otherwise limited by third parties prior to the commercialization of our product candidate, and if we do not own or have exclusive rights to other enforceable patents protecting our product candidate or technologies, competitors and other third parties could market products and use processes that are substantially similar, or superior, to ours and our business would suffer.

If the patent applications we hold or have in-licensed with respect to our development programs and product candidates fail to issue, if their validity, breadth or strength of protection is threatened, or if they fail to provide meaningful exclusivity for any of our current or future product candidates or technology, it could dissuade companies from collaborating with us to develop product candidates, encourage competitors to develop competing products or technologies and threaten our ability to commercialize future product candidates. Any such outcome could harm our business.

We are a party to intellectual property license agreements with GC Cell which are important to our business, and we expect to enter into additional license agreements in the future. Our existing license agreements impose, and we expect that future license agreements will impose, various diligence, royalties and other obligations on us. See “Business—Licensing Agreements.” If we fail to comply with our obligations under these agreements, or we are subject to a bankruptcy, or, in some cases, under other circumstances, the licensor may have the right to terminate the license, in which event we would not be able to market product candidate(s) covered by the license.

The patent position of biotechnology and pharmaceutical companies is generally highly uncertain, involves complex legal, scientific and factual questions, and is characterized by the existence of large numbers of patents and frequent litigation based on allegations of patent or other intellectual property infringement or violation. The standards that the USPTO and its foreign counterparts use to grant patents are not always applied predictably or uniformly. In addition, the laws of jurisdictions outside the United States may not protect our rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. For example, European patent law restricts the patentability of methods of treatment of the human body more than United States law does. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. Since patent applications in the United States and other jurisdictions are

[Table of Contents](#)

confidential for a period of time after filing, we cannot be certain that we were the first to file for patents covering our inventions. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in the issuance of patents, or may result in the issuance of patents which fail to protect our technology or products, in whole or in part, or which fail to effectively prevent others from commercializing competitive technologies and products.

The issuance of a patent is not conclusive as to its inventorship, ownership, scope, validity or enforceability and our owned and licensed patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. We may become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our owned or licensed patent rights. For example, with respect to our licensed patents and jointly owned patents and patent applications from GC Cell, competitors may claim that they invented the inventions claimed in our issued patents or patent applications prior to the inventors of our licensed patents. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. Thus, even if our patent applications issue as patents, they may not issue in a form that will provide us with meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage.

Moreover, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally 20 years after it is filed. Various extensions may be available; however, the life of a patent and the protection it affords, is limited. Without patent protection for our current or future product candidates, we may be open to competition from biosimilar versions of such products. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

Third parties may assert claims against us alleging infringement of their patents and proprietary rights, or we may need to become involved in lawsuits to defend or enforce our patents, either of which could result in substantial costs or loss of productivity, delay or prevent the development and commercialization of our product candidates, prohibit our use of proprietary technology or sale of products or put our patents and other proprietary rights at risk.

Our commercial success depends, in part, upon our ability to develop, manufacture, market and sell our product candidates without alleged or actual infringement, misappropriation or other violation of the patents and proprietary rights of third parties. However, our research, development and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. Litigation relating to infringement or misappropriation of patent and other intellectual property rights in the pharmaceutical and biotechnology industries is common, including patent infringement lawsuits, interferences, derivation and administrative law proceedings, inter partes review and post-grant review before the USPTO, as well as oppositions and similar processes in foreign jurisdictions. The various markets in which we plan to operate are subject to frequent and extensive litigation regarding patents and other intellectual property rights. Our competitors in both the United States and abroad, many of which have substantially greater resources and have made substantial investments in patent portfolios and competing technologies, may have applied for or obtained or may in the future apply for or obtain, patents that will prevent, limit or otherwise interfere with our ability to make, use and sell, if approved, our product candidates. In addition, many companies in intellectual property-dependent industries, including the biotechnology and pharmaceutical industries, have employed intellectual property litigation as a means to gain an advantage over their competitors. Numerous U.S., EU and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are developing product candidates, and as the biotechnology and pharmaceutical industries expand and more patents are issued, and as we gain greater visibility and market exposure as a public company, the risk increases that our product candidates may be subject to claims of infringement of the intellectual property rights of third parties. Some claimants may have substantially greater resources than we do and may be able to sustain the costs of complex intellectual property litigation to a

[Table of Contents](#)

greater degree and for longer periods of time than we could. In addition, patent holding companies that focus solely on extracting royalties and settlements by enforcing patent rights may target us.

We may be subject to third-party claims including patent infringement, interference or derivation proceedings, post-grant review and inter partes review before the USPTO or similar adversarial proceedings or litigation in other jurisdictions. Even if such claims are without merit, a court of competent jurisdiction could hold that these third-party patents are valid, enforceable and infringed, and the holders of any such patents may be able to block our ability to commercialize the applicable product candidate unless we obtained a license under the applicable patents, or until such patents expire or are finally determined to be invalid or unenforceable. There may be third-party patents or patent applications with claims to compositions, formulations, or methods of treatment, prevention use, or manufacture of our product candidates or technologies. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that our product candidates may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover aspects of our compositions, formulations, or methods of treatment, prevention or use, the holders of any such patents may be able to prohibit our use of those compositions, formulations, methods of treatment, prevention or use or other technologies, effectively blocking our ability to progress the clinical development of or commercialize the applicable product candidate until such patent expires or is finally determined to be invalid or unenforceable or unless we obtained a license.

We also may be subject to third party claims arising from prior employment agreements and/or consulting agreements entered into by our officers, employees, independent contractors and/or consultants. Claims may include breach of nondisclosure, nonuse, noncompetition and non-solicitation provisions, intellectual property assignment and ownership, and misuse or misappropriation of intellectual property, trade secrets and other confidential information, among others. If a court of competent jurisdiction finds that we breached the provisions of third party consulting agreements, we may be prohibited from using certain intellectual property, trade secrets and confidential information, effectively blocking our ability to seek patent protection for our inventions and halting the progress of our clinical development and commercialization efforts.

In addition, defending such claims would cause us to incur substantial expenses and, if successful, could cause us to pay substantial damages if we are found to be infringing a third party's intellectual property rights. These damages potentially include increased damages and attorneys' fees if we are found to have infringed such rights willfully. Further, if a patent infringement suit is brought against us or our third-party service providers, our development, manufacturing or sales activities relating to the product or product candidate that is the subject of the suit may be delayed or terminated, as parties making claims against us may obtain injunctive or other equitable relief. As a result of patent infringement claims, or in order to avoid potential infringement claims, we may choose to seek, or be required to seek, a license from the third party, which may require payment of substantial royalties or fees, or require us to grant a cross-license under our intellectual property rights. These licenses may not be available on reasonable terms or at all. Even if a license can be obtained on reasonable terms, the rights may be nonexclusive, which would give our competitors access to the same intellectual property rights. If we are unable to enter into a license on acceptable terms, we could be prevented from commercializing one or more of our product candidates, or forced to modify such product candidates, or to cease some aspect of our business operations, which could harm our business significantly. We might also be forced to redesign or modify our product candidates so that we no longer infringe the third-party intellectual property rights, which may result in significant cost or delay to us, or which redesign or modification could be impossible or technically infeasible. Even if we were ultimately to prevail, any of these events could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business. Intellectual property litigation, regardless of its outcome, may cause negative publicity, adversely impact prospective customers, cause product shipment delays, or prohibit us from manufacturing, importing, marketing or otherwise commercializing our products, services and technology. In addition, if the breadth or strength of protection provided the patents and patent applications we own or in-license is threatened, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

[Table of Contents](#)

Competitors may infringe our patents or other intellectual property. If we or one of our licensors or co-owners were to initiate legal proceedings against a third party to enforce a patent covering one of our product candidates, the defendant could counterclaim that our patent is invalid or unenforceable. In patent litigation in the United States and in Europe, defendant counterclaims alleging invalidity or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, for example, lack of novelty, obviousness lack of written description, or non-enablement. Third parties might allege unenforceability of our patents because during prosecution of the patent an individual connected with such prosecution withheld relevant information, or made a misleading statement. Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. The outcome of proceedings involving assertions of invalidity and unenforceability during patent litigation is unpredictable. With respect to the validity of patents, for example, we cannot be certain that there is no invalidating prior art of which we and the patent examiner were unaware during prosecution, but that an adverse third party may identify and submit in support of such assertions of invalidity. If a defendant were to prevail on a legal assertion of invalidity or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Our patents and other intellectual property rights also will not protect our technology if competitors design around our protected technology without infringing our patents or other intellectual property rights.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses and could distract our technical and management personnel from their normal responsibilities. In addition, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors view these announcements in a negative light, the price of our common stock could be adversely affected. Such litigation or proceedings could substantially increase our operating losses and reduce our resources available for development activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have an adverse effect on our ability to compete in the marketplace.

We may not identify relevant third-party patents or may incorrectly interpret the relevance, scope or expiration of a third-party patent, which might adversely affect our ability to develop, manufacture and market our product candidates.

It is possible that our or our licensors' or co-owners' patent searches or analyses, including but not limited to the identification of relevant patents, analysis of the scope of relevant patent claims or determination of the expiration of relevant patents, are not complete or thorough. It is also possible that we have not identified each and every third-party patent and pending application in the United States, Europe and elsewhere that is relevant to or necessary for the commercialization of our product candidates in any jurisdiction. For example, in the United States, applications filed before November 29, 2000, and certain applications filed after that date that will not be filed outside the United States remain confidential until patents issue. Patent applications in the United States, the EU and elsewhere are published approximately 18 months after the earliest filing for which priority is claimed, with such earliest filing date being commonly referred to as the priority date. Therefore, patent applications covering our product candidates could be filed by others without our knowledge. Additionally, pending patent applications that have been published can, subject to certain limitations, be later amended in a manner that could cover our product candidates or the use of our product candidates. After issuance, the scope of patent claims remains subject to construction as determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history. Our interpretation of the relevance or the scope of a patent or a pending application may be incorrect, which may negatively impact our ability to market our product candidates. We may incorrectly determine that our product candidates are not covered by a third-party patent or may incorrectly predict whether a third party's pending application will issue with claims of relevant scope. Our determination of the expiration date of any patent in the United States, the EU or elsewhere that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates. Our failure to identify and correctly interpret relevant patents may negatively impact our ability to develop and market our product candidates, if approved.

[Table of Contents](#)

If we fail to identify or correctly interpret relevant patents, we may be subject to infringement claims. We cannot guarantee that we will be able to successfully settle or otherwise resolve such infringement claims. If we fail in any such dispute, in addition to being forced to pay monetary damages, we may be temporarily or permanently prohibited from commercializing our product candidates. We might, if possible, also be forced to redesign our product candidates in a manner that no longer infringes third-party intellectual property rights. Any of these events, even if we were ultimately to prevail, could require us to divert substantial financial and management resources that we would otherwise be able to devote to our business.

Our intellectual property licenses with third parties may be subject to disagreements over contract interpretation, which could narrow the scope of our rights to the relevant intellectual property or technology or increase our financial or other obligations to our licensors.

We currently depend, and will continue to depend, on our license agreements, including our agreements with GC Cell. Further development and commercialization of our current or any future product candidates may require us to enter into additional license or collaboration agreements, including, potentially, additional agreements with GC Cell or any of our other licensors. The agreements under which we currently license intellectual property or technology from third parties are complex, and certain provisions in such agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the relevant agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects.

If any of our licenses or material relationships or any in-licenses upon which our licenses are based are terminated or breached, we may:

- lose our rights to develop and market our products;
- lose patent protection for our products;
- lose rights to important confidential know-how for manufacturing our products;
- experience significant delays in the development or commercialization of our products;
- incur significant extra costs in order to develop, manufacture and commercialize our products;
- not be able to obtain any other licenses on acceptable terms, if at all; or
- incur liability for damages.

These risks apply to any agreements that we may enter into in the future for our products or for any future product candidates. If we experience any of the foregoing, it could have a material adverse effect on our business, financial condition, results or operations and prospects.

Changes in patent laws or patent jurisprudence could diminish the value of patents in general, thereby impairing our ability to protect our product candidates.

As is the case with other biotechnology companies, our success is heavily dependent on our intellectual property, particularly our patents. Obtaining and enforcing patents in the biotechnology and genetic medicine industries involve both technological and legal complexity. Therefore, obtaining and enforcing biotechnology and genetic medicine patents is costly, time-consuming and inherently uncertain. In addition, the Leahy-Smith America Invents Act (AIA) which was passed in September 2011, resulted in significant changes to the U.S. patent system.

An important change introduced by the AIA is that, as of March 16, 2013, the United States transitioned from a “first-to-invent” to a “first-to-file” system for deciding which party should be granted a patent when two or more patent applications are filed by different parties claiming the same invention. Under a “first-to-file” system, assuming the other requirements for patentability are met, the first inventor to file a patent application generally will be entitled to a patent on the invention regardless of whether another inventor had made the invention earlier. A third party that files a patent application in the USPTO after that date but before us could therefore be awarded a patent covering an invention of ours even if we made the invention before it was made by the third party. This will require us to be cognizant going forward of the time from invention to filing of a patent application and be diligent in filing patent applications, but circumstances could prevent us from promptly filing patent applications on our inventions.

[Table of Contents](#)

Among some of the other changes introduced by the AIA are changes that limit where a patentee may file a patent infringement suit and providing opportunities for third parties to challenge any issued patent in the USPTO. This applies to all of our U.S. patents, even those issued before March 16, 2013. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in U.S. federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action.

Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. It is not clear what, if any, impact the AIA will have on the operation of our business. However, the AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of our or our licensors' or co-owners' patent applications and the enforcement or defense of our or our licensors' or co-owners' issued patents.

We may become involved in opposition, interference, derivation, inter partes review or other proceedings challenging our or our licensors' or co-owners' patent rights, and the outcome of any proceedings are highly uncertain. An adverse determination in any such proceeding could reduce the scope of, or invalidate, our owned or in-licensed patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights.

Additionally, the U.S. Supreme Court has ruled on several patent cases in recent years either narrowing the scope of patent protection available in certain circumstances or weakening the rights of patent owners in certain situations, and there are other open questions under patent law that courts have yet to decisively address. In addition to increasing uncertainty with regard to our ability to obtain patents in the future, this combination of events has created uncertainty with respect to the value of patents, once obtained. Depending on decisions by Congress, the federal courts and the USPTO, the laws and regulations governing patents could change in unpredictable ways and could weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future. In addition, the European patent system is relatively stringent in the type of amendments that are allowed during prosecution, but, the complexity and uncertainty of European patent laws has also increased in recent years. Complying with these laws and regulations could limit our ability to obtain new patents in the future that may be important for our business.

Further, on June 1, 2023, the European Patent Package (EU Patent Package) regulations were implemented with the goal of providing a single pan-European Unitary Patent and a new European Unified Patent Court (UPC), for litigation involving European patents. Under the UPC, all European patents, including those issued prior to ratification of the European Patent Package, will by default automatically fall under the jurisdiction of the UPC. The UPC provides our competitors with a new forum to centrally revoke our European patents, and allows for the possibility of a competitor to obtain pan-European injunctions. It will be several years before we will understand the scope of patent rights that will be recognized and the strength of patent remedies provided by the UPC. As the UPC is a new court system, there is no precedent for the court, increasing the uncertainty of any litigation. We will have the right to opt our patents out of the UPC over the first seven years of the court's existence, but doing so may preclude us from realizing the benefits, if any, of the new unified court.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

The USPTO, European and other patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In addition, periodic maintenance and annuity fees on any issued patent are due to be paid to the USPTO, European and other patent agencies over the lifetime of the patent. While an inadvertent failure to make payment of such fees or to comply with such provisions can in many cases be cured by additional payment of a late fee or by other means in accordance with the applicable rules, there are situations in which non-compliance with such provisions will result in the abandonment or lapse of the patent or patent application, and the partial or complete loss of patent rights in the relevant jurisdiction. Non-compliance events that could result in abandonment or lapse of a patent or patent application include failure to

respond to official actions within prescribed time limits, non-payment of fees and failure to properly legalize and submit formal documents within prescribed time limits. If we or our licensors or co-owners fail to maintain the patents and patent applications covering our product candidates or if we or our licensors or co-owners otherwise allow our patents or patent applications to be abandoned or lapse, it can create opportunities for competitors to enter the market, which would hurt our competitive position and could impair our ability to successfully progress clinical development of or commercialize our product candidates in any indication for which they may be approved.

We enjoy only limited geographical protection with respect to certain patents and we may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents covering our product candidates in all countries throughout the world would be prohibitively expensive, and even in countries where we have sought protection for our intellectual property, such protection can be less extensive than those in the United States. The requirements for patentability may differ in certain countries, particularly developing countries, and the breadth of patent claims allowed can be inconsistent. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. In-licensing patents covering our product candidates in all countries throughout the world may similarly be prohibitively expensive, if such opportunities are available at all. And in-licensing or filing, prosecuting and defending patents even in only those jurisdictions in which we develop or commercialize our product candidates may be prohibitively expensive or impractical. Competitors may use our and our licensors' and co-owners' technologies in jurisdictions where we have not obtained patent protection or licensed patents to develop their own products and, further, may export otherwise infringing products to territories where we and our licensors and co-owners have patent protection, but where enforcement is not as strong as that in the United States or the EU. These products may compete with our product candidates, and our or our licensors' or co-owners' patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

In addition, we may decide to abandon national and regional patent applications while they are still pending. The grant proceeding of each national or regional patent is an independent proceeding which may lead to situations in which applications may be rejected by the relevant patent office, while substantively similar applications are granted by others. For example, relative to other countries, China has a heightened requirement for patentability and specifically requires a detailed description of medical uses of a claimed drug. Furthermore, generic drug manufacturers or other competitors may challenge the scope, validity or enforceability of our or our licensors' or co-owners' patents, requiring us or our licensors or co-owners to engage in complex, lengthy and costly litigation or other proceedings. Generic drug manufacturers may develop, seek approval for and launch generic versions of our products. It is also quite common that depending on the country, the scope of patent protection may vary for the same product candidate or technology.

The laws of some jurisdictions do not protect intellectual property rights to the same extent as the laws or regulations in the United States and the EU and many companies have encountered significant difficulties in protecting and defending proprietary rights in such jurisdictions. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets or other forms of intellectual property, particularly those relating to biotechnology products, which could make it difficult for us to prevent competitors in some jurisdictions from marketing competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, are likely to result in substantial costs and divert our efforts and attention from other aspects of our business, and additionally could put at risk our or our licensors' or co-owners' patents of being invalidated or interpreted narrowly, could increase the risk of our or our licensors' or co-owners' patent applications not issuing, or could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate, while damages or other remedies may be awarded to the adverse party, which may be commercially significant. If we prevail, damages or other remedies awarded to us, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license. Furthermore, while we intend to protect our intellectual property rights in our expected significant markets, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our product candidates. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate, which may have an adverse effect on our ability to successfully commercialize our product candidates in all of our expected significant foreign markets. If we or our licensors or co-owners encounter

[Table of Contents](#)

difficulties in protecting, or are otherwise precluded from effectively protecting, the intellectual property rights important for our business in such jurisdictions, the value of these rights may be diminished and we may face additional competition in those jurisdictions.

In some jurisdictions including EU countries, compulsory licensing laws compel patent owners to grant licenses to third parties. In addition, some countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of such patent. If we or any of our licensors or co-owners are forced to grant a license to third parties under patents relevant to our business, or if we or our licensors or co-owners are prevented from enforcing patent rights against third parties, our competitive position may be substantially impaired in such jurisdictions.

Patent terms may be inadequate to protect our competitive position on our product candidates for an adequate amount of time.

The term of any individual patent depends on applicable law in the country where the patent is granted. In the United States, provided all maintenance fees are timely paid, a patent generally has a term of 20 years from its application filing date or earliest claimed non-provisional filing date. Extensions may be available under certain circumstances, but the life of a patent and, correspondingly, the protection it affords is limited. Even if we or our licensors or co-owners obtain patents covering our product candidates, when the terms of all patents covering a product expire, our business may become subject to competition from competitive medications, including generic medications. Given the amount of time required for the development, testing and regulatory review and approval of new product candidates, patents protecting such candidates may expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

If we do not obtain patent term extension in the United States under the Hatch-Waxman Act and in foreign countries under similar legislation, thereby potentially extending the term of marketing exclusivity for our product candidates, our business may be harmed.

In the United States, a patent that covers an FDA-approved drug or biologic may be eligible for a term extension designed to restore the period of the patent term that is lost during the premarket regulatory review process conducted by the FDA. Depending upon the timing, duration and conditions of FDA marketing approval of our product candidates, one or more of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984 (the Hatch-Waxman Act), which permits a patent term extension of up to five years for a patent covering an approved product as compensation for effective patent term lost during product development and the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval, and only claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. In the EU, our product candidates may be eligible for term extensions based on similar legislation. In either jurisdiction, however, we may not receive an extension if we fail to apply within applicable deadlines, fail to apply prior to expiration of relevant patents or otherwise fail to satisfy applicable requirements. Even if we are granted such extension, the duration of such extension may be less than our request. If we are unable to obtain a patent term extension, or if the term of any such extension is less than our request, the period during which we can enforce our patent rights for that product will be in effect shortened and our competitors may obtain approval to market competing products sooner. The resulting reduction of years of revenue from applicable products could be substantial.

Our proprietary rights may not adequately protect our technologies and product candidates, and do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- others may be able to make products that are the same as or similar to our product candidates but that are not covered by the claims of the patents that we own or have exclusively licensed;
- others, including inventors or developers of our owned or in-licensed patented technologies who may become involved with competitors, may independently develop similar technologies that function as alternatives or replacements for any of our technologies without infringing our intellectual property rights;

[Table of Contents](#)

- we or our licensors, co-owners, or our other collaboration partners might not have been the first to conceive and reduce to practice the inventions covered by the patents or patent applications that we own, license or will own or license;
- we or our licensors, co-owners, or our other collaboration partners might not have been the first to file patent applications covering certain of the patents or patent applications that we or they own or have obtained a license, or will own or will have obtained a license;
- we or our licensors or co-owners may fail to meet obligations to the U.S. government with respect to in-licensed patents and patent applications funded by U.S. government grants, leading to the loss of patent rights;
- it is possible that our pending patent applications will not result in issued patents;
- it is possible that there are prior public disclosures that could invalidate our or our licensors' or co-owners' patents;
- issued patents that we own or exclusively license may not provide us with any competitive advantage, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- we may not exclusively license our patents and, therefore, may not have a competitive advantage if such patents are licensed to others, including for example, under our license agreements with GC Cell, pursuant to which GC Cell and its upstream licensors retain the exclusive right over certain technologies;
- our competitors might conduct research and development activities in countries where we do not have patent rights, or in countries where research and development safe harbor laws exist, and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;
- ownership, validity or enforceability of our or our licensors' or co-owners' patents or patent applications may be challenged by third parties; and
- the patents of third parties or pending or future applications of third parties, if issued, may have an adverse effect on our business.

Our reliance on third parties may require us to share our trade secrets, which increases the possibility that our trade secrets will be misappropriated or disclosed, and confidentiality agreements with employees and third parties may not adequately prevent disclosure of trade secrets and protect other proprietary information.

We consider trade secrets and confidential know-how to be important to our business. We may rely on trade secrets and confidential know-how to protect our technology, especially where patent protection is believed by us to be of limited value. However, trade secrets and confidential know-how are difficult to protect, and we have limited control over the protection of trade secrets and confidential know-how used by our licensors, co-owners, collaborators and suppliers. Because we rely on third parties to manufacture our product candidates, may continue to do so in the future and expect to collaborate with third parties on the development of our current product candidates and any future product candidates we develop, we may, at times, share trade secrets and confidential know-how with them. We also conduct joint research and development programs that may require us to share trade secrets and confidential know-how under the terms of our research and development partnerships or similar agreements. Under such circumstances, trade secrets and confidential know-how can be difficult to maintain as confidential.

To protect this type of information against disclosure or appropriation by competitors, our policy is to require our employees, consultants, contractors and advisors to enter into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with us prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. However, current or former employees, consultants, contractors and advisers may unintentionally or willfully disclose our confidential information to competitors, and confidentiality agreements may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. The need to share trade secrets and other confidential know-how increases the risk that such trade secrets and confidential know-how become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our competitive position is based, in part, on our confidential know-how and trade secrets, a competitor's discovery of our trade secrets and/or confidential know-how or other unauthorized use or disclosure would impair our competitive position and may have an adverse effect on our business and results of operations. Enforcing a claim that a third party

[Table of Contents](#)

obtained illegally and is using trade secrets and/or confidential know-how is expensive, time consuming and unpredictable, and the enforceability of confidentiality agreements may vary from jurisdiction to jurisdiction. Courts outside the United States are sometimes less willing to protect proprietary information, technology and know-how. Further, we may need to share our trade secrets and confidential know-how with future business partners, collaborators, contractors and others located in countries at heightened risk of theft of trade secrets, including through direct intrusion by private parties or foreign actors, and those affiliated with or controlled by state actors.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets or confidential know-how, although our agreements may contain certain limited publication rights. Despite our efforts to protect our trade secrets and confidential know-how, our competitors may discover them, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets and/or confidential know-how would impair our competitive position and have an adverse impact on our business.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential partners or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks or trademarks that incorporate variations of our unregistered trademarks or trade names. Over the long term, if we are unable to successfully register our trademarks and trade names and establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. Our efforts to enforce or protect our proprietary rights related to trademarks, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely impact our financial condition or results of operations.

We may need to license additional intellectual property from third parties, and any such licenses may not be available or may not be available on commercially reasonable terms.

The growth of our business may depend in part on our ability to acquire or in-license additional proprietary rights. For example, our programs may involve product candidates that may require the use of additional proprietary rights held by third parties. Our product candidates may also require specific formulations to work effectively and efficiently. These formulations may be covered by intellectual property rights held by others. We may develop products containing our compositions and pre-existing pharmaceutical compositions. These pharmaceutical products may be covered by intellectual property rights held by others. We may be required by the FDA, or other comparable foreign regulatory authorities to provide a companion diagnostic test or tests with our product candidates. These diagnostic test or tests may be covered by intellectual property rights held by others. We may be unable to acquire or in-license any relevant third-party intellectual property rights that we identify as necessary or important to our business operations. We may fail to obtain any of these licenses at a reasonable cost or on reasonable terms, if at all, which would harm our business. We may need to cease use of the compositions or methods covered by such third-party intellectual property rights, and may need to seek to develop alternative approaches that do not infringe on such intellectual property rights which may entail additional costs and development delays, even if we were able to develop such alternatives, which may not be feasible. Even if we are able to obtain a license under such intellectual property rights, any such license may be non-exclusive, which may allow our competitors access to the same technologies licensed to us.

We may fail to obtain or enforce assignments of intellectual property rights from our employees and contractors.

While it is our policy to require our employees and contractors who may be involved in the conception or development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing an enforceable agreement with each party who in fact conceives or develops intellectual property that we regard as our own. Furthermore, our assignment agreements may not be self-executing or may be breached, and we may be forced to bring or defend claims to determine the ownership of what we regard as our intellectual property, and we may not be successful in such claims. If we fail in bringing or defending any such

claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Such an outcome could materially adversely affect our business, financial condition, results of operations and growth prospects. Even if we are successful in defending against such claims, litigation could result in substantial costs and distraction to management and other employees.

Confidentiality agreements with employees and third parties may not prevent unauthorized disclosure of trade secrets and other proprietary information.

In addition to the protection afforded by patents, we rely on trade secret protection and confidentiality agreements to protect trade secrets, confidential know-how, processes for which patents are difficult to enforce, and any other elements of our product discovery and development processes that involve proprietary information or technology that is not covered by patents. Trade secrets, however, may be difficult to protect. Although we require all of our employees to assign their inventions to us, and require all of our employees and key consultants who have access to our confidential know-how, information, or technology to enter into confidentiality agreements, we cannot be certain that our trade secrets and other confidential information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. Furthermore, the laws of some foreign countries do not protect proprietary rights to the same extent or in the same manner as the laws of the United States. As a result, we may encounter significant problems in protecting and defending our intellectual property both in the United States and abroad. If we are unable to prevent unauthorized material disclosure of our intellectual property to third parties, we will not be able to establish or maintain a competitive advantage in our market, which could materially adversely affect our business, operating results and financial condition.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of their former employers or other third parties.

We do and will continue to employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our licensors, competitors or potential competitors. Although we seek to protect our ownership of intellectual property rights by ensuring that our agreements with our employees, consultants, collaborators, independent contractors and other third parties with whom we do business include provisions requiring such parties to assign rights in inventions to us and to not use the know-how or confidential information of their former employer or other third parties, we may be subject to claims that we or our employees, consultants, collaborators or independent contractors have inadvertently or otherwise used or disclosed know-how or confidential information of their former employers or other third parties. We may also be subject to claims that former employers or other third parties have an ownership interest in our patents.

Litigation may be necessary to defend against these claims. We may not be successful in defending these claims, and if we do fail in defending any such claims, in addition to paying monetary damages, we may lose valuable personnel or intellectual property rights, such as exclusive ownership of, or right to use, valuable intellectual property, which could result in customers seeking other sources for the technology, or in ceasing from doing business with us. Any such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to progress our clinical development programs or commercialize our technology or product candidate. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful, litigation could result in substantial cost and reputational loss and be a distraction to our management and other employees. Moreover, any such litigation or the threat thereof may adversely affect our reputation, our ability to form strategic alliances or sublicense our rights to collaborators, engage with scientific advisors or hire employees or consultants, each of which would have an adverse effect on our business, results of operations and financial condition.

Risks Related to our Industry and Business

We will need to expand our organization, and we may experience challenges in managing this growth as we build our capabilities, which could disrupt our operations.

As of May 31, 2024, we had 81 full-time employees. We will need to expand our organization, and we may have difficulty identifying, hiring and integrating new personnel. Future growth would impose significant additional responsibilities on our management, including the need to identify, recruit, maintain, motivate and integrate additional employees, consultants and contractors. Also, our management may need to divert a disproportionate

amount of its attention away from our day-to-day activities and devote a substantial amount of time to managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenues could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize our product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

Our future success depends on our ability to retain our key personnel and to attract, retain and motivate qualified personnel.

Our industry has experienced a high rate of turnover of management personnel in recent years. We are highly dependent on our executive officers, as well as the other members of our management, scientific and clinical teams. Although we have formal employment agreements with our executive officers, these agreements do not prevent them from terminating their employment with us at any time and, for certain of our executive officers, entitle them to receive severance payments in connection with their voluntary resignation of employment for good reason, as defined in the employment agreements. Additional details regarding these arrangements can be found in the section titled “Executive and Director Compensation—Employment Arrangements with our Named Executive Officers.”

If we lose one or more of our executive officers or key employees, our ability to implement our business strategy successfully could be seriously harmed. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of highly specialized skills and experience required to develop, gain regulatory approval of and commercialize our product candidates successfully. Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key personnel on acceptable terms given the competition among numerous biopharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be engaged by entities other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to advance the clinical development of and commercialize product candidates will be limited.

If our information technology systems or those of the third parties upon which we rely or our data is or were compromised or fail, we could experience adverse impacts resulting from such compromise or failure, including, but not limited to, interruptions to our operations such as our clinical trials, claims that we breached our data protection obligations, harm to our reputation, and a loss of customers or sales.

In the ordinary course of our business, we and third parties upon which we rely collect, receive, process, generate, use, transfer, disclose, make accessible, protect, secure, dispose of, transmit, share and store (collectively, process) confidential and sensitive data, including intellectual property, pre-clinical and clinical trial data, proprietary business information and personal information of employees, business partners and service providers (collectively, Confidential Information) necessary to conduct our business in our and the third parties' upon which we rely data centers and networks. The secure processing, maintenance and transmission of this Confidential Information is critical to our operations. Despite our security measures, our information technology and infrastructure, and those of third parties upon which we rely, including our current and future CROs, may be vulnerable to attacks, damage and interruption from hackers or internal bad actors, human error, misconfigurations, “bugs” and other technical vulnerabilities, fraud, malfeasance, computer viruses and malware (e.g., ransomware), cyber attacks, social engineering attacks (including through deep fakes, which may be increasingly more difficult to identify as fake, and phishing attacks), denial or degradation of service attacks, server malfunction, software or hardware failures, loss of data or other information technology assets, adware, attacks enhanced or facilitated by artificial intelligence, natural disasters, terrorism, war and telecommunication and electrical failures or other disruptions. Such threats are prevalent, continue to rise, are increasingly difficult to detect and come from a variety of sources, including traditional computer “hackers,” threat actors, “hacktivists,” organized criminal threat actors, personnel, sophisticated nation states and nation-state supported actors, including via advanced persistent threat intrusions.

[Table of Contents](#)

Ransomware attacks, including those from organized criminal threat actors, nation-states and nation-state supported actors, are becoming increasingly prevalent and severe and can lead to significant interruptions, delays, or outages in our operations, loss of data (including Confidential Information), loss of income, significant extra expenses to restore data or systems, reputational loss and the diversion of funds. To alleviate the financial, operational and reputational impact of a ransomware attack, it may be preferable to make extortion payments, but we may be unwilling or unable to do so (including, for example, if applicable laws or regulations prohibit such payments).

Additionally, as a result of the COVID-19 pandemic, we may also face increased cybersecurity risks due to our reliance on internet technology and the number of our employees who continue to work remotely, which may create additional opportunities for cybercriminals to exploit vulnerabilities and utilizing network connections, information technology and devices outside our premises or network, including working at home, while in transit and in public locations. Future or past business transactions (such as acquisitions or integrations) could expose us to additional cybersecurity risks and vulnerabilities, as our systems could be negatively affected by vulnerabilities present in acquired or integrated entities' systems and technologies. Furthermore, we may discover security issues that were not found during due diligence of such acquired or integrated entities, and it may be difficult to integrate companies into our information technology environment and security program.

We rely on third parties to operate critical business systems to process Confidential Information in a variety of contexts, including, without limitation, cloud-based infrastructure, data center facilities, encryption and authentication technology, employee email, clinical trials and other functions. Our ability to monitor these third parties' information security practices is limited, and these third parties may not have adequate information security measures in place. If these parties experience a security breach or other interruption, we could experience adverse consequences. While we may be entitled to damages if these third parties fail to satisfy their data privacy or security-related obligations to us, any award may be insufficient to cover our damages, or we may be unable to recover such award. In addition, supply chain attacks have increased in frequency and severity, and we cannot guarantee that third parties and infrastructure in our supply chain have not been compromised or that they do not contain exploitable defects or bugs that could result in a breach of or disruption to our systems and networks or the systems and networks of third parties that support us and our services.

Furthermore, because the techniques used to obtain unauthorized access to, or to sabotage, systems change frequently and often are not recognized until launched against a target, we may be unable to anticipate these techniques or implement adequate preventative measures. We may also experience security breaches that may remain undetected for an extended period. We take steps to detect, mitigate and remediate vulnerabilities in our information technology systems (such as our hardware and/or software and those of third parties upon which we rely). We may not, however, detect and remediate all such vulnerabilities including on a timely basis. Further, we may experience delays in developing and deploying remedial measures and patches designed to address identified vulnerabilities. Vulnerabilities could be exploited and result in a security breach. Even if identified, we may be unable to adequately investigate or remediate incidents or breaches due to attackers increasingly using tools and techniques that are designed to circumvent controls, to avoid detection and to remove or obfuscate forensic evidence.

We and certain of the third parties upon which we rely are from time to time subject to cyber attacks and security incidents. Although, to our knowledge, we have not experienced any material security breach to date, any such breach could compromise our networks and the Confidential Information stored there could be accessed, publicly disclosed, lost or stolen. While we have taken steps to protect the security of the Confidential Information that we handle, there can be no assurance that our and the third parties' upon which we rely cybersecurity risk management program and processes, including policies, controls or procedures and other security measures that we have implemented will be fully implemented, complied with or effective in protecting our systems, networks and Confidential Information against current or future security threats. Our security measures could fail and result in unauthorized, accidental or unlawful access to, or disclosure, modification, misuse, loss or destruction of, our Confidential Information, including personal information. We may expend significant resources or modify our business activities (including our clinical trial activities) to try to protect against security breaches. Certain data privacy and security obligations may require us to implement and maintain specific security measures or industry-standard or reasonable security measures to protect our information technology systems and Confidential Information.

[Table of Contents](#)

Applicable data privacy and security obligations may require us to notify relevant stakeholders, including affected individuals, regulators and investors, of security breaches. The costs associated with the investigation, remediation and making such disclosures are costly, and the disclosure or the failure to comply with such requirements could lead to adverse consequences. Any such unauthorized access, disclosure or other loss of Confidential Information experienced by (or perceived to be experienced by) us or a third party upon which we rely could also result in adverse consequences, such as legal claims or proceedings, liability under laws that protect the privacy of personal information, significant regulatory proceedings or penalties, additional reporting requirements or oversight, restrictions on processing Confidential Information, litigation (including class actions), indemnification obligations, monetary fund diversions, diversion of management attention, financial loss, disruptions to our operations and cause a loss of confidence in us and our ability to conduct clinical trials, which could adversely affect our reputation. For example, the loss of preclinical study or clinical trial data from completed, ongoing or planned trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Additionally, theft of our Confidential Information could require substantial expenditures to remedy. To the extent that any disruption or security breach were to result in a loss of or damage to our data or applications, or inappropriate disclosure of Confidential Information, we could incur liability and the further development of our product candidates could be delayed. Further, our insurance coverage may not be sufficient to cover the financial, legal, business or reputational losses that may result from an interruption or breach of our systems.

Our business is subject to risks arising from pandemic and epidemic diseases.

The COVID-19 worldwide pandemic presented substantial public health and economic challenges and affected our employees, patients, physicians and other healthcare providers, communities and business operations, as well as the U.S. and global economies and financial markets. Any future pandemic or epidemic disease outbreaks could disrupt the supply chain and the manufacture or shipment of our product candidates for use in our clinical trials and research and preclinical studies and, delay, limit or prevent our employees and CROs from continuing research and development activities, impede our clinical trial initiation and recruitment and the ability of patients to continue in clinical trials, alter the results of the clinical trial due to disease progression in participants, impede testing, monitoring, data collection and analysis and other related activities, any of which could delay our preclinical studies and clinical trials and increase our development costs, and have a material adverse effect on our business, financial condition and results of operations. Any future pandemic or epidemic disease outbreak could also potentially further affect the business of the FDA or other comparable foreign regulatory authorities, which could result in delays in meetings related to our ongoing or planned clinical trials, as well have an adverse impact on global economic conditions, which could have an adverse effect on our business and financial condition, including impairing our ability to raise capital when needed.

Our business could be affected by litigation, government investigations, and enforcement actions.

We currently operate in a number of jurisdictions in a highly regulated industry, and we could be subject to litigation, government investigation and enforcement actions on a variety of matters in the United States or foreign jurisdictions, including, without limitation, intellectual property, regulatory, product liability, environmental, whistleblower, false claims, data privacy and security, anti-kickback, anti-bribery, securities, commercial, employment and other claims and legal proceedings that may arise from conducting our business. Any determination that our operations or activities are not in compliance with existing laws or regulations could result in the imposition of fines, civil and criminal penalties, equitable remedies, including disgorgement, injunctive relief and/or other sanctions against us, and remediation of any such findings could have an adverse effect on our business operations.

Legal proceedings, government investigations and enforcement actions can be expensive and time-consuming. An adverse outcome resulting from any such proceedings, investigations or enforcement actions could result in significant damages awards, fines, penalties, exclusion from the federal healthcare programs, healthcare debarment, injunctive relief, product recalls, reputational damage and modifications of our business practices, which could have a material adverse effect on our business and results of operations. Even if such a proceeding, investigation, or enforcement action is ultimately decided in our favor, the investigation and defense thereof could require substantial financial and management resources.

Our employees and independent contractors, including consultants, vendors and any third parties we may engage in connection with development and commercialization may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could harm our business.

Misconduct by our employees and independent contractors, including consultants, vendors and any third parties we may engage in connection with development and commercialization, could include intentional, reckless or negligent conduct or unauthorized activities that violate: (1) the laws and regulations of the FDA, EU and comparable foreign regulatory authorities, including those laws that require the reporting of true, complete and accurate information to such authorities; (2) manufacturing standards; (3) data privacy and security laws, and fraud and abuse and other healthcare laws and regulations; or (4) other laws that require the reporting of true, complete and accurate financial information and data. Specifically, sales, marketing and business arrangements in the healthcare industry are subject to extensive laws and regulations intended to prevent fraud, misconduct, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and promotion, sales commission, customer incentive programs and other business arrangements. Activities subject to these laws could also involve the improper use or misrepresentation of information obtained in the course of clinical trials, creation of fraudulent data in preclinical studies or clinical trials or illegal misappropriation of drug product, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to comply with such laws or regulations. Additionally, we are subject to the risk that a person or government could allege fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgements, possible exclusion from participation in Medicare, Medicaid, other U.S. federal healthcare programs or healthcare programs in other jurisdictions, integrity oversight and reporting obligations to resolve allegations of non-compliance, imprisonment, other sanctions, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations.

Our ability to use our net operating loss carryforwards and certain other tax attributes may be limited.

We have incurred losses during our history, we expect to continue to incur significant losses for the foreseeable future, and we may never achieve profitability. Under current law, U.S. federal net operating losses (NOLs) incurred in taxable years beginning after December 31, 2017, can be carried forward indefinitely, but the deductibility of such U.S. federal NOLs in a taxable year is limited to 80% of taxable income in such year.

As of December 31, 2023, we had federal net operating loss carryforwards of approximately \$73.0 million and state net operating loss carryforwards of \$91.2 million. All of our federal net operating loss carryforwards as of December 31, 2023 can be carried forward indefinitely. State net operating loss carryforwards begin to expire in 2039. Our NOL carryforwards are subject to review and possible adjustment by the U.S. and state tax authorities.

In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended (the Code), and corresponding provisions of state law, if a corporation undergoes an “ownership change,” which is generally defined as a greater than 50 percentage point change (by value) in its equity ownership over a rolling three-year period, the corporation’s ability to use its pre-change NOL carryforwards, research and development (R&D) credits and certain other tax attributes to offset its post-change income or taxes may be limited. This could limit the amount of NOLs, R&D credit carryforwards or other applicable tax attributes that we can utilize annually to offset future taxable income or tax liabilities. We have not completed a Section 382 ownership change analysis. If ownership changes have occurred or occur in the future, the amount of remaining tax attribute carryforwards available to offset taxable income and income tax expense in future years may be restricted or eliminated. Changes to U.S. tax rules in respect of the utilization of NOLs, R&D credits and other applicable tax attributes could further affect our ability to use our tax attributes in the future. In addition, at the state level, there may be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. As a result, we may be unable to use all or a material portion of our NOL carryforwards and other tax attributes, which could adversely affect our future cash flows.

Changes in tax laws or regulations that are applied adversely to us or our customers may have a material adverse effect on our business, cash flow, financial condition or results of operations.

New income, sales, use or other tax laws, statutes, rules, regulations or ordinances could be enacted at any time, which could adversely affect our business operations and financial performance. Further, existing tax laws, statutes, rules, regulations or ordinances could be interpreted, changed, modified or applied adversely to us. For example, legislation informally titled the Tax Cuts and Jobs Act, the Coronavirus Aid, Relief, and Economic Security Act and the Inflation Reduction Act enacted many significant changes to the U.S. tax laws. Future guidance from the Internal Revenue Service and other tax authorities with respect to such legislation may affect us, and certain aspects of such legislation could be repealed or modified in future legislation. In addition, it is uncertain if and to what extent various states will conform to such legislation or any newly enacted federal tax legislation. Changes in corporate tax rates, the realization of net deferred tax assets relating to our operations, the taxation of foreign earnings and the deductibility of expenses or future reform legislation could have a material impact on the value of our deferred tax assets, could result in significant one-time charges and could increase our future U.S. tax expense.

Investors' expectations of our performance relating to environmental, social and governance factors may impose additional costs and expose us to new risks.

There is an increasing focus from certain investors, employees and other stakeholders concerning corporate responsibility, specifically related to environmental, social and governance factors. Some investors may use these factors to guide their investment strategies and, in some cases, may choose not to invest in us if they believe our policies relating to corporate responsibility are inadequate, including if they believe our policies relating to our Pledge 1% Movement commitment are inadequate. Third-party providers of corporate responsibility ratings and reports on companies have increased to meet growing investor demand for measurement of corporate responsibility performance. The criteria by which companies' corporate responsibility practices are assessed may change, which could result in greater expectations of us and cause us to undertake costly initiatives to satisfy such new criteria. If we elect not to or are unable to satisfy such new criteria, investors may conclude that our policies with respect to corporate responsibility are inadequate. We may face reputational damage in the event that our corporate responsibility procedures or standards do not meet the standards set by various constituencies.

Furthermore, if our competitors' corporate responsibility performance is perceived to be greater than ours, potential or current investors may elect to invest with our competitors instead. In addition, in the event that we communicate certain initiatives and goals regarding environmental, social and governance matters, including with respect to the Pledge 1% Movement campaign, we could fail, or be perceived to fail, in our achievement of such initiatives or goals, or we could be criticized for the scope of such initiatives or goals. If we fail to satisfy the expectations of investors, employees and other stakeholders or our initiatives are not executed as planned, our reputation and financial results could be materially and adversely affected.

Risks Related to This Offering and Ownership of Our Common Stock

An active trading market for our common stock may not develop or be sustained.

Prior to this offering, there has been no public market for our common stock. We intend to have applied for listing of our common stock on The Nasdaq Global Market under the symbol "ARTV." We believe that upon the completion of this offering, we will meet the standards for listing on Nasdaq and the closing of this offering is contingent upon such listing. An active trading market for our shares may never develop or be sustained following this offering. In addition, the initial price for our common stock in this offering will be determined through negotiations with the underwriters and may vary from the market price of our common stock following this offering. The lack of an active market may impair the value of your shares, your ability to sell your shares at the time you wish to sell them and the prices that you may obtain for your shares. Further, an inactive trading market for our shares may also impair our ability to raise capital by selling shares of our common stock or enter into strategic partnerships and transactions by issuing our shares of common stock as consideration. If an active trading market for our common stock does not develop, or is not sustained, you may not be able to sell your shares quickly or at the market price, or at all, and it may be difficult for you to sell your shares without depressing the market price for our common stock.

The trading price of our common stock may be volatile and you could lose all or part of your investment.

The trading price of our common stock after this offering is likely to be volatile. The stock market in general and the market for biopharmaceutical companies in particular have experienced extreme volatility that has often been

[Table of Contents](#)

unrelated to the operating performance of particular companies. As a result of this volatility, you may not be able to sell your shares of common stock at or above the initial public offering price. The market price for our common stock may be influenced by those factors discussed in this “Risk Factors” section and many other factors, including:

- timing and results of our preclinical studies and clinical trials or those of our competitors;
- the costs and timing of manufacturing for our product candidates, including developing our own manufacturing capabilities;
- the success of existing or new competitive therapies, products or technologies;
- development of new product candidates that may address our markets and make our product candidates less attractive;
- failure or discontinuation of any of our research or development programs;
- any termination or loss of rights under our GC Cell Research Services Agreement and our Master Agreement for Manufacturing Services with GC Cell;
- changes in the level of expenses related to any of our research or development programs;
- developments related to any existing or future collaborations;
- the recruitment or departure of key personnel;
- regulatory or legal developments in the United States and other countries;
- announcements by us, our partners or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations or capital commitments;
- changes in the structure of healthcare payment systems;
- the results of our efforts to discover, develop, acquire or in-license additional product candidates or products;
- developments or disputes concerning patent applications, issued patents or other proprietary rights;
- changes in failure to meet or exceed financial estimates and projections of the investment community or that we provide to the public;
- actual or expected changes in estimates as to financial results, development timelines or recommendations by securities analysts;
- announcement or expectation of additional financing efforts;
- sales of common stock by us, our executive officers, directors or principal stockholders, or others;
- variations in our financial results or those of companies that are perceived to be similar to us;
- market conditions in the pharmaceutical and biotechnology sectors;
- general economic, industry and market conditions;
- changes in accounting principles; and
- the other factors described in this “Risk Factors” section and elsewhere in this prospectus.

In addition, the stock market in general and the market for biopharmaceutical companies in particular have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to operating performance of the particular companies affected. Following price volatility, holders of securities may institute securities class action litigation against the issuer. If any of holders of our common stock were to bring such a lawsuit against us, we could incur substantial costs defending the lawsuit and the attention of our board of directors and senior management would be diverted from the operation of our business. Any adverse determination in litigation could also subject us to significant liabilities. Further, a decline in the financial markets and related factors beyond our control may cause the price of our common stock to decline rapidly and unexpectedly. If the market price of our common stock following this offering does not exceed the initial public offering price, you may not realize any return on, or you may lose some or all of your investment.

After this offering, our executive officers, directors and principal stockholders, if they choose to act together, will continue to have the ability to control or significantly influence all matters submitted to stockholders for approval.

Upon the closing of this offering, our executive officers, directors and stockholders who owned more than 5% of our outstanding common stock before this offering and their respective affiliates will, in the aggregate, hold approximately % of our outstanding common stock (based on the number of shares of common stock

outstanding as of March 31, 2024 and assuming no purchase of shares in this offering by any of this group). As a result, if these stockholders choose to act together, they would be able to control or significantly influence all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these persons, if they choose to act together, would control or significantly influence the election of directors, the composition of our management and approval of any merger, consolidation, sale of all or substantially all of our assets or other business combination that other stockholders may desire. The interests of these stockholders may not always coincide with your interests or the interests of other stockholders and they may act in a manner that advances their best interests and not necessarily of those of other stockholders, including seeking a premium value for their common stock. Any of these actions could adversely affect the market price of our common stock.

A significant portion of our total outstanding shares are eligible to be sold into the market in the near future, which could cause the market price of our common stock to drop significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market, or the perception in the market that the holders of a large number of stockholders intend to sell shares of our common stock, could reduce the market price of our common stock. After this offering, we will have _____ shares of common stock outstanding. This includes the shares that we are selling in this offering, which may be resold in the public market immediately without restriction, unless purchased by our affiliates. Substantially all of the remaining _____ shares of common stock initially will be restricted as a result of securities laws, market standoff provisions or lock-up agreements, but will become eligible to be sold after this offering as described in the section titled “Shares Eligible for Future Sale.”

Moreover, after this offering, holders of an aggregate of _____ shares of common stock will have rights, subject to specified conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders, until such shares can otherwise be sold without restriction under Rule 144 under the Securities Act of 1933, as amended (the Securities Act), or until the rights terminate pursuant to the terms of the stockholders agreement between us and such holders. We also intend to register all shares of common stock subject to equity awards issued or reserved for future issuance under our equity compensation plans on a registration statement on Form S-8. Once we register these shares, they can be freely sold in the public market upon issuance, subject to volume limitations applicable to affiliates under Rule 144 under the Securities Act and the market standoff provisions and lock-up agreements described above. Any sales of securities by these stockholders could have a negative impact on the trading price of our common stock.

If you purchase common stock in this offering, you will suffer immediate and substantial dilution of your investment.

The initial public offering price of our common stock is substantially higher than the net tangible book value per share of our common stock. Net tangible book value represents the amount by which our tangible assets exceed our liabilities. Based on an assumed initial public offering price of \$ _____ per share (the midpoint of the price range set forth on the cover page of this prospectus), you will experience immediate dilution of \$ _____ per share as of March 31, 2024, representing the difference between our pro forma as adjusted net tangible book value per share, after giving effect to this offering and the assumed initial public offering price. This dilution is due to our investors who purchased shares prior to this offering having paid a price for their shares that is substantially less than the price offered to the public in this offering, as well as the exercise of stock options granted to our employees. To the extent any outstanding options are exercised, you will experience further dilution. As a result of this dilution, investors purchasing stock in this offering may receive significantly less than the full purchase price that they paid for the shares purchased in this offering in the event of a liquidation. See the section titled “Dilution” for additional information.

Future sales and issuances of our securities, including pursuant to our equity incentive plans and our commitment to the Pledge 1% Movement, may cause dilution to our stockholders or decrease our stock price.

We expect that significant additional capital may be necessary to continue our planned operations, including for expanding product development, conducting clinical trials and commercializing our product candidates. We may seek additional capital through public or private equity or debt financings or other capital sources, which may include strategic collaborations and other strategic arrangements with third parties, to enable us to complete the development and potential commercialization of our product candidates. To the extent that we raise additional capital through the sale of equity or convertible debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder.

[Table of Contents](#)

Pursuant to our 2024 Plan, our management is authorized to grant stock options and other equity-based awards to our employees, directors and consultants. Additionally, the number of shares of our common stock reserved for issuance under our 2024 Plan will automatically increase on January 1 of each calendar year, beginning on January 1, 2025 and continuing through and including January 1, 2034, by 5% of the total number of shares of our common stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. In addition, pursuant to our ESPP, the number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, beginning on January 1, 2025 (through January 1, 2034), by the lesser of (i) 1% of the total number of shares of our common stock outstanding on the last day of the calendar month before the date of the automatic increase, and (ii) _____ shares; provided that before the date of any such increase, our board of directors may determine that such increase will be less than the amount set forth in clauses (i) and (ii). Unless our board of directors elects not to increase the number of shares available for future grant each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

Pursuant to our commitment to the Pledge 1% Movement campaign, in July 2021, our board of directors approved the reservation of up to 370,865 shares of our common stock (the Reserve) (which represented approximately 1.0% of our fully-diluted capitalization as of such date) that we may issue to or for the benefit of a charitable foundation established by us or other appropriate charitable recipients. The Reserve will be donated in equal installments over five years following this offering or in full upon a sale of our company, in each case, first subject to certain per-share valuation thresholds for our common stock. We have not yet issued any of the Reserve. If any of the Reserve is issued pursuant to our Pledge 1% Movement commitment, such issuance may also dilute your ownership interest. Additional details regarding our commitment to the Pledge 1% Movement campaign can be found in the section titled “Business—Corporate Philanthropy.”

Participation in this offering by our existing stockholders and/or their affiliated entities may reduce the public float for our common stock.

To the extent certain of our existing stockholders and their affiliated entities participate in this offering, such purchases would reduce the non-affiliate public float of our shares, meaning the number of shares of our common stock that are not held by officers, directors and controlling stockholders. A reduction in the public float could reduce the number of shares that are available to be traded at any given time, thereby adversely impacting the liquidity of our common stock and depressing the price at which you may be able to sell shares of common stock purchased in this offering.

We are an emerging growth company and a smaller reporting company and the reduced disclosure requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors.

We are an “emerging growth company,” as defined in the JOBS Act, and may remain an emerging growth company until the last day of the fiscal year following the fifth anniversary of the closing of this offering. However, if certain events occur prior to the end of such five-year period, including if we become a “large accelerated filer,” our annual gross revenues exceed \$1.24 billion or we issue more than \$1.0 billion of non-convertible debt in any three-year period, we will cease to be an emerging growth company prior to the end of such five-year period. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- being permitted to provide only two years of audited financial statements, in addition to any required unaudited interim financial statements, with correspondingly reduced “Management’s Discussion and Analysis of Financial Condition and Results of Operations” disclosure in this prospectus;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor’s report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and

- exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved.

In addition, as an “emerging growth company” the JOBS Act allows us to delay adoption of new or revised accounting pronouncements applicable to public companies until such pronouncements are made applicable to private companies.

We have taken advantage of the reduced reporting burdens in this prospectus and the information we provide to stockholders will be different than the information that is available with respect to other public companies that are not emerging growth companies. For example, in this prospectus we have only included two years of audited financial statements and have not included all of the executive compensation-related information that would be required if we were not an emerging growth company. It is possible that this may cause investors to find our common stock less attractive. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our share price may be reduced or more volatile.

Even following the termination of our status as an emerging growth company, we may be able to take advantage of the reduced disclosure requirements applicable to “smaller reporting companies,” as that term is defined in Rule 12b-2 of the Exchange Act, and, in particular, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements. To the extent that we are no longer eligible to use exemptions from various reporting requirements, we may be unable to realize our anticipated cost savings from these exemptions, which could have a material adverse impact on our operating results.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. We expect that we will use the net proceeds of this offering as set forth in the section titled “Use of Proceeds.” However, our use of these proceeds may differ substantially from our current plans. The failure by our management to apply these funds effectively could result in financial losses that could have a negative impact on our business, cause the price of our common stock to decline and delay the development of our product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Future changes in financial accounting standards or practices may cause adverse and unexpected revenue fluctuations and adversely affect our reported results of operations.

Future changes in financial accounting standards may cause adverse, unexpected revenue fluctuations and affect our reported financial position or results of operations. Financial accounting standards in the United States are constantly under review and new pronouncements and varying interpretations of pronouncements have occurred with frequency in the past and are expected to occur again in the future. As a result, we may be required to make changes in our accounting policies. Those changes could affect our financial condition and results of operations or the way in which such financial condition and results of operations are reported. Compliance with new accounting standards may also result in additional expenses. As a result, we intend to invest all reasonably necessary resources to comply with evolving standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from business activities to compliance activities. See the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Recent Accounting Pronouncements.” As an emerging growth company, the JOBS Act allows us to delay adoption of new or revised accounting standards applicable to public companies until such pronouncements are made applicable to private companies. We have elected to use the extended transition period for complying with new or revised accounting standards and as a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates. However, we may elect to early adopt any new or revised accounting standards whenever such early adoption is permitted for non-public companies. We may take advantage of these exemptions up until the time that we are no longer an emerging growth company.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, would be your sole source of gain.

We have never declared or paid any cash dividends on our common stock. We currently anticipate that we will retain future earnings for the development, operation and expansion of our business and do not anticipate declaring or paying any cash dividends for the foreseeable future. As a result, capital appreciation, if any, of our common stock

[Table of Contents](#)

would be your sole source of gain on an investment in our common stock for the foreseeable future. See the section titled “Dividend Policy” for additional information.

Delaware law and provisions in our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect at the completion of this offering could make a merger, tender offer or proxy contest difficult, thereby depressing the trading price of our common stock.

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to the completion of this offering, respectively, may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change in our control);
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that the board of directors or any individual director may only be removed with cause and the affirmative vote of the holders of at least 66-2/3% of the voting power of all of our then outstanding common stock;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide our board of directors into three classes;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner and also specify requirements as to the form and content of a stockholder's notice;
- do not provide for cumulative voting rights, therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose; and
- provide that special meetings of our stockholders may be called only by the Chairman of the board, our Chief Executive Officer or by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the holders of at least 66-2/3% of our then-outstanding common stock.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law (Section 203). These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision.

These and other provisions in our amended and restated certificate of incorporation, amended and restated bylaws and Delaware law could make it more difficult or costly for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by our then-current board of directors, including delay or impede a merger, tender offer or proxy contest involving our company. The existence of these provisions could negatively affect the price of our common stock and limit opportunities for you to realize value in a corporate transaction.

For information regarding these and other provisions, see “Description of Capital Stock.”

Our amended and restated certificate of incorporation will provide that the Court of Chancery of the State of Delaware and any appellate court therefrom will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers or employees.

Our amended and restated certificate of incorporation will provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for the following types of actions or proceedings under Delaware statutory or common law: (i) any derivative claim or cause of action brought on our behalf; (ii) any claim or cause of action that is based upon a violation of a duty owed by any current or former director, officer, other employee or stockholder, to us or our stockholders; (iii) any claim or cause of action against us or any current or former director, officer or other employee, arising out of or pursuant to any provision of the Delaware General Corporation Law, our Certificate of Incorporation or our Bylaws; (iv) any claim or cause of action seeking to interpret, apply, enforce or determine the validity of our Certificate of Incorporation or our Bylaws (including any right, obligation, or remedy thereunder); (v) any claim or cause of action as to which the Delaware General Corporation Law confers jurisdiction on the Court of Chancery of the State of Delaware; and (vi) any claim or cause of action against us or any current or former director, officer or other employee, governed by the internal-affairs doctrine or otherwise related to our internal affairs, in all cases to the fullest extent permitted by applicable law and subject to the court having personal jurisdiction over the indispensable parties named as defendant; provided, however, that if the designation of such court as the sole and exclusive forum for a claim or action referred to in foregoing clauses (i) through (vi) would violate applicable law, then the United States District Court for the District of Delaware shall be the sole and exclusive forum for such claim or cause of action. These provisions would not apply to suits brought to enforce a duty or liability created by the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. Additionally, investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our amended and restated certificate of incorporation will further provide that unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, including all causes of action asserted against any defendant named in such complaint. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our amended and restated certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

These choice of forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers or other employees and may discourage these types of lawsuits and result in increased costs for investors to bring a claim. If a court were to find the choice of forum provisions contained in our amended and restated certificate of incorporation to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions.

General Risk Factors

We will incur increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives and corporate governance practices.

As a public company, and particularly after we no longer qualify as an emerging growth company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Nasdaq listing requirements and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make

[Table of Contents](#)

some activities more time-consuming and costly. For example, we expect that these rules and regulations may make it more difficult and more expensive for us to obtain director and officer liability insurance, which in turn could make it more difficult for us to attract and retain qualified members of our board of directors.

We are evaluating these rules and regulations, and cannot predict or estimate the amount of additional costs we may incur or the timing of such costs. These rules and regulations are often subject to varying interpretations, in many cases due to their lack of specificity, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices.

Pursuant to Section 404 of the Sarbanes-Oxley Act (Section 404) we will be required to furnish a report by our management on our internal control over financial reporting beginning with our second filing of an Annual Report on Form 10-K with the SEC after we become a public company. However, while we remain an emerging growth company or smaller reporting company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. To achieve compliance with Section 404 within the prescribed period, we will be engaged in a process to document and evaluate our internal control over financial reporting, which is both costly and challenging. In this regard, we will need to continue to dedicate internal resources, potentially engage outside consultants, adopt a detailed work plan to assess and document the adequacy of internal control over financial reporting, continue steps to improve control processes as appropriate, validate through testing whether such controls are functioning as documented and implement a continuous reporting and improvement process for internal control over financial reporting. In addition, if we identify one or more material weaknesses as a result of this implementation and evaluation process, it could result in an adverse reaction in the financial markets due to a loss of confidence in the reliability of our financial statements.

Unstable market and economic conditions, including any adverse macroeconomic conditions or geopolitical events, may have serious adverse consequences on our business, financial condition and stock price.

The global credit and financial markets have experienced extreme volatility and disruptions in the past several years, including severely diminished liquidity and credit availability, rising inflation and monetary supply shifts, rising interest rates, supply chain constraints, labor shortages, declines in consumer confidence, declines in economic growth, increases in unemployment rates, recession risks and uncertainty about economic stability. The financial markets and the global economy may also be adversely affected by the current or anticipated impact of public health crises, military conflict, including the conflict between Russia and Ukraine and the ongoing conflict in the Middle East, terrorism or other geopolitical events. For example, the COVID-19 pandemic resulted in widespread unemployment, economic slowdown and extreme volatility in the capital markets. Sanctions imposed by the United States and other countries in response to military conflicts, including the one in Ukraine, may also adversely impact the financial markets and the global economy, and any economic countermeasures by the affected countries or others could exacerbate market and economic instability. The extent of the impact of these conditions on our operational and financial performance, including our ability to execute our business strategies and initiatives in the expected timeframe, as well as that of third parties upon whom we rely, will depend on future developments which are uncertain and cannot be predicted. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. Events involving limited liquidity, defaults, non-performance or other adverse developments that affect financial institutions, or concerns or rumors about any events of these kinds or other similar risks, have in the past and may in the future lead to market-wide liquidity problems. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. If the current equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly and more dilutive. Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay or abandon clinical development plans. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive an economic downturn, which could directly affect our ability to attain our operating goals on schedule and on budget.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud. As a result, stockholders could lose confidence in our financial and other public reporting, which would harm our business and the trading price of our common stock.

Section 404(a) of the Sarbanes-Oxley Act requires that beginning with our second annual report following our initial public offering, management assess and report annually on the effectiveness of our internal control over financial reporting and identify any material weaknesses in our internal control over financial reporting. Although Section 404(b) of the Sarbanes-Oxley Act requires our independent registered public accounting firm to issue an annual report that addresses the effectiveness of our internal control over financial reporting, we have opted to rely on the exemptions provided in the JOBS Act, and consequently will not be required to comply with SEC rules that implement Section 404(b) until such time as we are no longer an emerging growth company or smaller reporting company.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and, together with adequate disclosure controls and procedures, are designed to prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations. In addition, any testing by us conducted in connection with Section 404, or any subsequent testing by our independent registered public accounting firm, may reveal deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses or that may require prospective or retroactive changes to our financial statements or identify other areas for further attention or improvement. Inadequate internal controls could also cause investors to lose confidence in our reported financial information, which could have a negative effect on the trading price of our common stock.

Our disclosure controls and procedures may not prevent or detect all errors or acts of fraud.

Upon the completion of this offering, we will become subject to the periodic reporting requirements of the Exchange Act. We designed our disclosure controls and procedures to reasonably assure that information we must disclose in reports we file or submit under the Exchange Act is accumulated and communicated to management, and recorded, processed, summarized and reported within the time periods specified in the rules and forms of the SEC. We believe that any disclosure controls and procedures or internal controls and procedures, no matter how well-conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met.

These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. For example, our directors or executive officers could inadvertently fail to disclose a new relationship or arrangement causing us to fail to make any related party transaction disclosures. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by an unauthorized override of the controls. Accordingly, because of the inherent limitations in our control system, misstatements due to error or fraud may occur and not be detected.

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because biopharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business. Additionally, the increase in the cost of directors' and officers' liability insurance may cause us to opt for lower overall policy limits or to forgo insurance that we may otherwise rely on to cover significant defense costs, settlements and damages awarded to plaintiffs.

If securities or industry analysts do not publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our common stock, our share price and trading volume could decline.

The trading market for our common stock will be influenced by the research and reports that industry or securities analysts publish about us or our business. We do not currently have, and may never obtain, research coverage by securities and industry analysts. If no or few securities or industry analysts commence coverage of us, the trading price for our shares could be negatively impacted. In the event we obtain securities or industry analyst coverage, if any of the analysts who cover us issue an adverse or misleading opinion regarding us, our business model, our intellectual property or our share performance, or if any of our preclinical studies or clinical trials and operating

[Table of Contents](#)

results fail to meet the expectations of analysts, our stock price would likely decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

Our operations are concentrated in one location, and we or the third parties upon whom we depend may be adversely affected by a wildfire and earthquake or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Our current operations are predominantly located in California. Any unplanned event, such as a flood, wildfire, explosion, earthquake, extreme weather condition, epidemic or pandemic, power outage, telecommunications failure or other natural or manmade accidents or incidents that result in us being unable to fully utilize our facilities may have a material and adverse effect on our ability to operate our business, particularly on a daily basis, and have significant negative consequences on our financial and operating conditions. Any similar impacts of natural or manmade disasters on our third-party CMOs and contract research organizations, or CROs, could cause delays in our clinical trials and may have a material and adverse effect on our ability to operate our business and have significant negative consequences on our financial and operating conditions. If a natural disaster, power outage or other event occurred that prevented us from using our clinical sites, impacted clinical supply or the conduct of our clinical trials, that damaged critical infrastructure, such as the manufacturing facilities of our third-party CMOs, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible, for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we and our CMOs and CROs have in place may prove inadequate in the event of a serious disaster or similar event. In the event of an accident or incident at these facilities, we cannot assure you that the amounts of insurance we currently carry will be sufficient to satisfy any damages and losses. If our facilities, or the manufacturing facilities of our CMOs or CROs, are unable to operate because of an accident or incident or for any other reason, even for a short period of time, any or all of our development programs may be harmed. Any business interruption could adversely affect our business, financial condition, results of operations and prospects.

Our insurance policies may be inadequate, may not cover all of our potential liabilities and may potentially expose us to unrecoverable risks.

We do not carry insurance for all categories of risk that our business may encounter. Some of the policies we currently maintain include property, general liability, employee benefits liability, business automobile, workers' compensation, clinical trials/products liability, cybersecurity liability, directors' and officers' and employment practices insurance. We do not know, however, if we will be able to maintain insurance with adequate levels of coverage. No assurance can be given that an insurance carrier will not seek to cancel or deny coverage after a claim has occurred. Any significant uninsured liability may require us to pay substantial amounts, which would adversely affect our financial position and results of operations. For example, although we maintain product liability insurance coverage that also covers our clinical trials, this insurance may not be adequate to cover all liabilities that we may incur, and we may be required to increase our product liability insurance coverage. We anticipate that we will need to increase our insurance coverage each time we commence a clinical trial and if we successfully commercialize any product candidate. Insurance availability, coverage terms and pricing continue to vary with market conditions. We endeavor to obtain appropriate insurance coverage for insurable risks that we identify. However, we may fail to correctly anticipate or quantify insurable risks, we may not be able to obtain appropriate insurance coverage and insurers may not respond as we intend to cover insurable events that may occur. Any significant uninsured liability may require us to pay substantial amounts, which would materially adversely affect our business, financial condition, results of operations and growth.

In addition, although we are dependent on certain key personnel, we do not have key person life insurance policies on any such individuals other than our Chief Executive Officer. While we maintain some life insurance coverage on our Chief Executive Officer, the insurance proceeds may not be sufficient to compensate for the adverse effects that we expect would arise from the loss of Dr. Aslan and the costs associated with recruiting a new Chief Executive Officer. Therefore, if any of our key personnel die or become disabled, the loss of such person could materially adversely affect our business, financial condition, results of operations and growth prospects.

Conflicts of interest may arise because some members of our board of directors are representatives of our principal stockholders.

Certain of our principal stockholders or their affiliates are venture capital funds or other investment vehicles that could invest in entities that directly or indirectly compete with us. As a result of these relationships, when conflicts arise between the interests of the principal stockholders or their affiliates and the interests of other stockholders, members of our board of directors that are representatives of the principal stockholders may not be disinterested.

The increasing use of social media platforms presents new risks and challenges.

Social media is increasingly being used to communicate about our clinical development programs and the diseases our product candidates are being developed to treat. We intend to utilize appropriate social media in connection with communicating about our development programs. Social media practices in the biopharmaceutical industry continue to evolve and regulations relating to such use are not always clear. This evolution creates uncertainty and risk of noncompliance with regulations applicable to our business. For example, patients may use social media channels to report an alleged adverse event during a clinical trial. When such disclosures occur, we may fail to monitor and comply with applicable adverse event reporting obligations, or we may not be able to defend our business or the public's legitimate interests in the face of the political and market pressures generated by social media due to restrictions on what we may say about our investigational products. There is also a risk of inappropriate disclosure of sensitive information or negative or inaccurate posts or comments about us on any social networking website, or a risk that a post on a social networking website by any of our employees may be construed as inappropriate promotion. If any of these events were to occur or we otherwise fail to comply with applicable regulations, we could incur liability, face regulatory actions, or incur other harm to our business.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements within the meaning of the federal securities laws, which statements are subject to substantial risks and uncertainties and are based on estimates and assumptions. All statements other than statements of historical facts, including statements concerning our plans, objectives, goals, strategies, future events, future revenues or performance, financing needs, plans or intentions relating to product candidates and markets, and business trends and other information contained in this prospectus are forward-looking statements, including statements about:

- the success, cost, timing and potential indications of our product development activities and clinical trials, including the ongoing clinical trials of AlloNK;
- the timing of our planned IND submissions to the FDA for our product candidates, including AlloNK;
- the timing of the initiation, enrollment and completion of planned clinical trials;
- the ability to obtain regulatory approval for our manufacturing facility in San Diego, California and the cost and timing associated therewith;
- our ability to obtain and maintain regulatory approval of our product candidates, including AlloNK, in any of the indications for which we plan to develop them, and any related restrictions, limitations and/or warnings in the label of an approved product candidate;
- our ability to obtain funding for our operations, including funding necessary to complete the clinical trials of any of our product candidates, including AlloNK;
- our plans to research and develop our product candidates, including AlloNK;
- our ability to attract and retain collaborators with development, regulatory and commercialization expertise;
- the size of the markets for our product candidates, and our ability to serve those markets;
- our ability to successfully commercialize our product candidates, including AlloNK;
- the rate and degree of market acceptance of our product candidates, including AlloNK;
- our ability to develop and maintain sales and marketing capabilities, whether alone or with potential future collaborators;
- the performance of our third-party suppliers and manufacturers;
- the success of competing therapies that are or become available;
- existing regulations and regulatory developments in the United States and other jurisdictions;
- the implementation of our business model and strategic plans for our business and operations;
- our ability to attract and retain key scientific or management personnel;
- our anticipated use of the net proceeds from this offering;
- the accuracy of our estimates regarding expenses, future revenues, capital requirements and needs for additional financing;
- our expectations regarding the impact of global health pandemics, geopolitical conflicts and economic uncertainty, including rising interest rates and inflation on our business and operations, including clinical trials, collaborators, CROs and employees;
- our expectations regarding the period during which we will qualify as an emerging growth company under the JOBS Act; and
- our expectations regarding our ability to obtain and maintain intellectual property protection for our product candidates and our ability to operate our business without infringing on the intellectual property rights of others.

In some cases, you can identify forward-looking statements by terms such as “anticipate,” “believe,” “continue” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target” or “will” or the negative of these terms or other similar expressions intended to identify statements about the future. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking

[Table of Contents](#)

statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and investors are cautioned not to unduly rely upon these statements.

You should read the section titled “Risk Factors” for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. As a result of these factors, we cannot assure you that the forward-looking statements in this prospectus will prove to be accurate. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

You should read this prospectus and the documents that we reference in this prospectus and have filed as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements in this prospectus by these cautionary statements.

INDUSTRY AND OTHER DATA

Certain market, industry and competitive data included in this prospectus were obtained from our own internal estimates and research, as well as from publicly available information, reports of governmental agencies and academic and industry research, publications and surveys conducted by third parties. In some cases, we do not expressly refer to the sources from which this data is derived. All of the market and industry data used in this prospectus is inherently subject to uncertainties and involve a number of assumptions and limitations. Such data and the industry in which we operate are subject to a high degree of uncertainty and risk due to a variety of factors, including those described in the section titled "Risk Factors." These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

DIVIDEND POLICY

We have never declared or paid, and do not anticipate declaring or paying, in the foreseeable future, any cash dividends on our capital stock. We currently intend to retain all available funds and any future earnings to support our operations and finance the growth and development of our business. Any future determination related to our dividend policy will be made at the discretion of our board of directors and will depend upon, among other factors, our results of operations, financial condition, capital requirements, contractual restrictions, business prospects and other factors our board of directors may deem relevant.

USE OF PROCEEDS

We estimate that the net proceeds to us from this offering will be approximately \$ million (or approximately \$ million if the underwriters exercise their option to purchase additional shares in full) from the sale of the shares of common stock offered by us in this offering, assuming an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us from this offering by approximately \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each one million share increase (decrease) in the number of shares offered by us would increase (decrease) the net proceeds to us from this offering by approximately \$ million, assuming that the assumed initial offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We do not expect that a change in the initial price to the public or the number of shares by these amounts would have a material effect on the uses of the proceeds from this offering, although it may accelerate the time at which we will need to seek additional capital.

The principal purposes of this offering are to obtain additional capital to support our operations, to create a public market for our common stock and to facilitate our future access to the public equity markets. We intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and short-term investments, as follows:

- approximately \$ million to fund the clinical development of AlloNK, including through initial clinical data from our Phase 1/1b trial in patients with class III or IV LN and the basket IIT in multiple autoimmune diseases; and
- the remainder for additional discovery activities and preclinical development and clinical development across our pipeline programs, as well as headcount costs, manufacturing and supply activities, working capital and other general corporate purposes.

We may also use a portion of the remaining net proceeds to in-license, acquire or invest in complementary businesses, technologies, products or assets, although we have no current agreements, commitments or understandings to do so.

Based on our current operating plan, we estimate that our existing cash, cash equivalents and short-term investments as of the date of this prospectus, together with the estimated net proceeds from this offering, will be sufficient to fund our operating expenses and capital expenditures through . After this offering, we will require substantial capital in order to advance our product candidates through clinical trials, regulatory approval and commercialization. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we expect.

This expected use of existing cash, cash equivalents and short-term investments and our net proceeds from this offering represent our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. Predicting the costs necessary to develop product candidates can be difficult, and we will need substantial additional capital to complete our clinical development of any of our product candidates. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress and costs of our development activities, the status of and results from clinical trials, as well as the status and results from our current and any future collaborations with third parties for our product candidates, and any unforeseen cash needs.

Our management will have broad discretion in the application of the net proceeds from this offering, and investors will be relying on the judgment of our management regarding the application of those net proceeds. The timing and

[Table of Contents](#)

amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business. Pending these uses, we plan to invest these net proceeds in short-term, interest bearing obligations, investment-grade instruments, medium term securities, certificates of deposit or direct or guaranteed obligations of the United States.

CAPITALIZATION

The following table sets forth our cash, cash equivalents and short-term investments and capitalization as of March 31, 2024:

- on an actual basis;
- on a pro forma basis, giving effect to (i) the automatic conversion of all outstanding shares of convertible preferred stock into an aggregate of 27,019,554 shares of our common stock and the related reclassification of the convertible preferred stock to permanent equity in connection with the closing of this offering, (ii) the automatic conversion of our outstanding SAFEs into an aggregate of _____ shares of common stock, based on an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, at a 15% discount to the initial public offering price, in connection with the closing of this offering, and (iii) the filing and effectiveness of our amended and restated certificate of incorporation, which will occur immediately prior to the closing of this offering; and
- on a pro forma as adjusted basis to reflect (i) the pro forma adjustments set forth above and (ii) our sale of _____ shares of common stock in this offering at an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma and pro forma as adjusted information below is illustrative only, and our cash, cash equivalents and short-term investments and capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read the information in this table together with our financial statements and related notes included elsewhere in this prospectus and the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and other financial information contained in this prospectus.

	AS OF MARCH 31, 2024		
	ACTUAL	PRO FORMA (unaudited)	PRO FORMA AS ADJUSTED ⁽¹⁾
	(in thousands, except share and per share data)		
Cash, cash equivalents and short-term investments	\$ 62,134	\$	\$
Simple agreements for future equity (SAFEs)	\$ 25,368	\$	\$
Convertible preferred stock (Series A and B), par value \$0.0001 per share; 27,019,554 shares authorized, issued and outstanding, actual; no shares authorized, issued and outstanding, pro forma and pro forma as adjusted	216,413		
Stockholders’ (deficit) equity:			
Preferred stock, par value \$0.0001 per share; no shares authorized, issued and outstanding, actual; 10,000,000 shares authorized, pro forma and pro forma as adjusted; no shares issued and outstanding, pro forma and pro forma as adjusted	—		
Common stock, par value \$0.0001 per share; 38,998,588 shares authorized, 3,551,690 shares issued and outstanding, actual; 700,000,000 shares authorized, pro forma and pro forma as adjusted; _____ shares issued and outstanding, pro forma; _____ shares issued and outstanding, pro forma as adjusted	—		
Additional paid-in capital	20,394		
Accumulated other comprehensive income	207		
Accumulated deficit	(195,274)		

Table of Contents

AS OF MARCH 31, 2024

	ACTUAL	PRO FORMA (unaudited)	PRO FORMA AS ADJUSTED ⁽¹⁾
	(in thousands, except share and per share data)		
Total stockholders' (deficit) equity	(174,673)		
Total capitalization	\$ 67,108	\$	

(1) The pro forma as adjusted information set forth above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of our cash, cash equivalents and short-term investments, additional paid-in capital, total stockholders' (deficit) equity and total capitalization by approximately \$ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. Each one million share increase (decrease) in the number of shares offered by us at the assumed initial public offering price per share of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of our cash, cash equivalents and short-term investments, additional paid-in capital, total stockholders' (deficit) equity and total capitalization by approximately \$ million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

The information in the table above excludes:

- 6,568,326 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2024, under our 2020 Plan, with a weighted-average exercise price of \$1.15 per share;
- 98,750 shares of common stock issuable upon the vesting and settlement of restricted stock units outstanding as of March 31, 2024, under our 2020 Plan;
- 1,421,000 shares of our common stock (1,245,000 to executive officers, 60,000 to non-employee directors and 116,000 to other employees and consultants) issuable upon the exercise of outstanding stock options granted subsequent to March 31, 2024, under our 2020 Plan, with a weighted-average price of \$3.07 per share;
- shares of our common stock issuable upon the exercise of stock options to be granted to certain of our employees and executive officers under the 2024 Plan, which will become effective upon the execution and delivery of the underwriting agreement for this offering, with an exercise price that is equal to the initial public offering price in this offering;
- shares of common stock reserved for future issuance under the 2024 Plan, (which shares include new shares plus the number of shares (not to exceed shares) (i) that remain available for the issuance of awards under the 2020 Plan, at the time the 2024 Plan becomes effective, and (ii) any shares underlying outstanding stock awards granted under the 2020 Plan that, on or after the 2024 Plan becomes effective, terminate or expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section titled "Executive and Director Compensation—Equity Incentive Plans"), as well as any automatic increases in the number of our common stock reserved for future issuance under the 2024 Plan;
- shares of our common stock reserved for future issuance under the ESPP, as well as any annual automatic increases in the number of shares of our common stock reserved for future issuance under the ESPP, which will become effective upon the execution and delivery of the underwriting agreement for this offering; and
- 370,865 shares of our common stock reserved for issuance pursuant to the Pledge 1% Movement campaign. See the section titled "Business—Corporate Philanthropy" for more information.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be immediately diluted to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock after this offering.

As of March 31, 2024, our historical net tangible book value (deficit) was \$(175.0) million, or \$(49.26) per share of our common stock. Our historical net tangible book value (deficit) per share represents the amount of our total tangible assets (net of deferred offering costs) less our total liabilities and convertible preferred stock, which is not included in our stockholders' deficit, divided by the total number of shares of common stock outstanding as of March 31, 2024.

After giving effect to (i) the automatic conversion of all outstanding shares of our convertible preferred stock into 27,019,554 shares of our common stock and the related reclassification of the carrying value of our convertible preferred stock to permanent equity, in connection with the closing of this offering and (ii) the automatic conversion of our outstanding SAFEs into an aggregate of _____ shares of common stock, based on an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, at a 15% discount to the initial public offering price, in connection with the closing of this offering, and assuming the occurrence of such conversions on March 31, 2024, our pro forma net tangible book value as of March 31, 2024 would have been approximately \$ _____ million, or approximately \$ _____ per share of our common stock.

Net tangible book value dilution per share to new investors represents the difference between the amount per share paid by purchasers of shares of common stock in this offering and the pro forma as adjusted net tangible book value per share of common stock immediately after closing of this offering. After giving further effect to the sale of _____ shares of our common stock that we are offering at the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of March 31, 2024 would have been \$ _____ million, or approximately \$ _____ per share. This amount represents an immediate increase in pro forma net tangible book value of \$ _____ per share to our existing stockholders and an immediate dilution in pro forma net tangible book value of approximately \$ _____ per share to new investors participating in this offering.

Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors. The following table illustrates this dilution:

Assumed initial public offering price per share	\$
Historical net tangible book value (deficit) per share as of March 31, 2024	\$(49.26)
Pro forma increase in historical net tangible book value (deficit) per share as of March 31, 2024, attributable to the conversion of all outstanding shares of convertible preferred stock and all outstanding SAFEs described above	_____
Pro forma net tangible book value per share as of March 31, 2024, before this offering	_____
Increase in pro forma net tangible book value per share attributable to investors participating in this offering	_____
Pro forma as adjusted net tangible book value per share after this offering	_____
Dilution per share to new investors participating in this offering	\$

The dilution information discussed above is illustrative only and will change based on the actual initial public offering price and other terms of this offering determined at pricing. Each \$1.00 increase (decrease) in the assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted net tangible book value per share after

[Table of Contents](#)

this offering by approximately \$, and dilution in pro forma net tangible book value per share to new investors by approximately \$, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting underwriting discounts and commissions and the estimated offering expenses payable by us.

We may also increase or decrease the number of shares we are offering. Each increase of one million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase our pro forma as adjusted net tangible book value per share after this offering by approximately \$ and decrease the dilution to investors participating in this offering by approximately \$ per share, assuming that the assumed initial public offering price remains the same, and after deducting underwriting discounts and commissions and the estimated offering expenses payable by us. Similarly, each decrease of one million shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the pro forma as adjusted net tangible book value per share after this offering by approximately \$ and increase the dilution to investors participating in this offering by approximately \$ per share, assuming the assumed initial public offering price of \$ per share remains the same, and after deducting underwriting discounts and commissions and the estimated offering expenses payable by us.

If the underwriters exercise their option to purchase up to additional shares of our common stock in full in this offering, the pro forma as adjusted net tangible book value after the offering would be \$ per share, the increase in pro forma as adjusted net tangible book value per share to existing stockholders would be \$ per share and the dilution per share to new investors would be \$ per share, in each case assuming an initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus.

To the extent that outstanding options with an exercise price per share that is less than the pro forma as adjusted net tangible book value per share are exercised, or if any restricted stock units vest and settle, new investors will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

The following table summarizes, on a pro forma as adjusted basis as of March 31, 2024, the number of shares of common stock purchased or to be purchased from us, the total consideration paid or to be paid to us in cash and the average price per share paid by existing stockholders for shares issued prior to this offering and the price to be paid by new investors in this offering. The calculation below is based on the assumed initial public offering price of \$ per share, before deducting underwriting discounts and commissions and estimated offering expenses payable by us. As the table below shows, investors participating in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	SHARES PURCHASED		TOTAL CONSIDERATION		WEIGHTED- AVERAGE PRICE PER SHARE
	NUMBER	PERCENT	AMOUNT	PERCENT	
Existing stockholders		%	\$	%	\$
Investors participating in this offering					
Total		100.0%	\$	100.0%	\$

Each \$1.00 increase in the assumed initial public offering price of \$ per share would increase total consideration paid by new investors, total consideration paid by all stockholders and the weighted-average price per share paid by all stockholders by \$ million, \$ million and \$, respectively, while each \$1.00 decrease in the assumed initial public offering price of \$ per share, would decrease total consideration paid by new investors, total consideration paid by all stockholders and the average price per share paid by all stockholders by \$ million, \$ million and \$, respectively, and assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and before deducting underwriting discounts and commissions and estimated offering expenses payable by us.

Table of Contents

Similarly, each one million share increase in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase the total consideration paid by investors participating in this offering, total consideration paid by all stockholders and the weighted-average price per share paid by all stockholders by approximately \$ million, \$ million and \$, respectively, while each one million share decrease in the number of shares offered by us, as set forth on the cover page of this prospectus, would decrease the total consideration paid by investors participating in this offering, total consideration paid by all stockholders and the weighted-average price per share paid by all stockholders by approximately \$ million, \$ million and \$, respectively, assuming the assumed initial public offering price of \$ per share remains the same, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

Except as otherwise indicated, the discussion and the tables above assume no exercise of the underwriters' option to purchase additional shares of our common stock and excludes:

- 6,568,326 shares of common stock issuable upon the exercise of stock options outstanding as of March 31, 2024, under our 2020 Plan, with a weighted-average exercise price of \$1.15 per share;
- 98,750 shares of common stock issuable upon the vesting and settlement of restricted stock units outstanding as of March 31, 2024, under our 2020 Plan;
- 1,421,000 shares of our common stock (1,245,000 to executive officers, 60,000 to non-employee directors and 116,000 to other employees and consultants) issuable upon the exercise of outstanding stock options granted subsequent to March 31, 2024, under our 2020 Plan, with a weighted-average price of \$3.07 per share;
- shares of our common stock issuable upon the exercise of stock options to be granted to certain of our employees and executive officers under the 2024 Plan, which will become effective upon the execution and delivery of the underwriting agreement for this offering, with an exercise price that is equal to the initial public offering price in this offering;
- shares of common stock reserved for future issuance under the 2024 Plan, (which shares include new shares plus the number of shares (not to exceed shares) (i) that remain available for the issuance of awards under the 2020 Plan, at the time the 2024 Plan becomes effective and (ii) any shares underlying outstanding stock awards granted under the 2020 Plan that, on or after the 2024 Plan becomes effective, terminate or expire or are repurchased, forfeited, cancelled or withheld, as more fully described in the section titled "Executive and Director Compensation—Equity Incentive Plans"), as well as any automatic increases in the number of our common stock reserved for future issuance under the 2024 Plan;
- shares of our common stock reserved for future issuance under the ESPP, as well as any annual automatic increases in the number of shares of our common stock reserved for future issuance under the ESPP, which will become effective upon the execution and delivery of the underwriting agreement for this offering; and
- 370,865 shares of our common stock reserved for issuance pursuant to the Pledge 1% Movement campaign. See the section titled "Business—Corporate Philanthropy" for more information.

We may choose to raise additional capital through the sale of equity or convertible debt securities due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that stock options are exercised, restricted stock units are vested and settled or we issue additional shares of common stock or other equity or convertible debt securities in the future, there will be further dilution to investors participating in this offering.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with our audited financial statements and related notes as of and for the years ended December 31, 2022 and 2023, and our unaudited condensed financial statements and related notes as of December 31, 2023 and March 31, 2024, and for the three months ended March 31, 2023 and 2024 included elsewhere in this prospectus. This discussion and analysis and other parts of this prospectus contain forward-looking statements based upon current beliefs, plans and expectations that involve risks, uncertainties and assumptions, such as statements regarding our plans, objectives, expectations, intentions and projections. Our actual results and the timing of selected events could differ materially from those anticipated in these forward-looking statements as a result of several factors, including those set forth in the section titled "Risk Factors" and elsewhere in this prospectus. You should carefully read the "Risk Factors" section of this prospectus to gain an understanding of the important factors that could cause actual results to differ materially from our forward-looking statements. Please also see the section titled "Special Note Regarding Forward-Looking Statements."

Overview

We are a clinical-stage biotechnology company focused on developing NK cell-based therapies for patients suffering from devastating autoimmune diseases and cancers. Our product candidates are derived from donor cells (allogeneic) rather than a patient's own cells (autologous) and are pre-manufactured, stored frozen and ready to ship to a patient's treatment location, making them what we believe to be "off-the-shelf." Our lead product candidate, AlloNK, is a non-genetically modified, cryopreserved NK cell therapy being evaluated in combination with B-cell targeted mAbs in an ongoing Phase 1/1b trial in class III or class IV LN and a basket IIT in multiple autoimmune indications. Seminal peer-reviewed clinical studies using auto-CAR-T for the treatment of autoimmune diseases have demonstrated that deep B-cell depletion in the periphery and in the lymphoid tissue can lead to drug free disease remission. We have already demonstrated that AlloNK in combination with rituximab was able to drive deep B-cell depletion in the periphery and observed CRs in heavily pre-treated patients naïve to auto-CAR-T in our ongoing Phase 1/2 clinical trial in patients with relapsed or refractory B-NHL. We believe the preliminary results from our Phase 1/2 clinical trial evaluating AlloNK in combination with rituximab in patients with B-NHL provide a readthrough to autoimmune disease because efficacy in both diseases appears to be accomplished with a shared mechanism of action involving B-cell depletion in the periphery and in the lymphoid tissues, followed by an immunological reset and B-cell reconstitution. We expect to report initial data on autoimmune indications from at least one of our Phase 1/1b trial or the basket IIT in the first half of 2025.

We commenced our operations in 2019 and have devoted substantially all of our resources to date to organizing and staffing our company, business planning, raising capital, establishing and engaging in collaborations, conducting research and development, advancing and scaling up product candidate manufacturing, establishing cold chain delivery logistics, establishing and protecting our intellectual property portfolio and providing general and administrative support for these activities. Our operations to date have been funded primarily through the issuance and sale of convertible promissory notes, convertible preferred stock, and simple agreements for future equity (SAFEs). From our inception through March 31, 2024, we have raised aggregate gross proceeds of \$8.0 million from the issuance and sale of convertible promissory notes, \$70.0 million from our Series A convertible preferred stock financings, \$120.0 million from our Series B convertible preferred stock financing and \$24.4 million from our SAFEs. As of March 31, 2024, we had cash, cash equivalents and short-term investments of \$62.1 million. Based on our current operating plan, we estimate that our existing cash, cash equivalents and short-term investments as of the date of this prospectus, together with the estimated net proceeds from this offering, will be sufficient to fund our operating expenses and capital expenditures through . However, this estimate is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. We have based this estimate on assumptions that may prove to be wrong, and we could deplete our capital resources sooner than we expect.

Our comprehensive net losses were \$58.8 million and \$28.4 million for the years ended December 31, 2022 and 2023, respectively, and \$16.7 million and \$14.1 million for the three months ended March 31, 2023 and 2024, respectively. As of March 31, 2024, we had an accumulated deficit of \$195.3 million. Our net losses may fluctuate significantly from quarter-to-quarter and year-to-year, depending on the timing of our clinical development activities,

[Table of Contents](#)

other research and development activities and capital expenditures. We expect to continue to incur significant expenses and increasing operating losses for the foreseeable future. We anticipate our expenses will increase substantially as we seek to advance our product candidates through clinical and preclinical development, expand our research and development activities, expand AlloNK development across several autoimmune indications, seek regulatory approval and, if we receive regulatory approval, commercialize our products, as well as hire additional personnel, protect our intellectual property, and, following this offering, incur additional costs associated with being a public company.

We have incurred net losses and negative cash flows from operations since our inception and expect to continue to incur significant and increasing operating losses for the foreseeable future. We have never generated any revenue from product sales and do not expect to generate any revenues from product sales unless and until we successfully complete development of and obtain regulatory approval for our product candidates, which will not be for several years, if ever. In addition, if we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. Accordingly, until such time as we can generate significant revenue from sales of our product candidates, if ever, we expect to finance our cash needs through public or private equity or debt financings or other capital sources, which may include our existing and any future strategic collaborations and other strategic arrangements with third parties. However, we may not be able to raise additional funds or enter into such other arrangements when needed or on favorable terms, or at all. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders will be or could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing and equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through collaboration or licensing arrangements with third parties or other strategic transactions, we may have to relinquish rights to our intellectual property, future revenue streams, research programs, or product candidates or grant licenses on terms that may not be favorable to us and/or may reduce the value of our common stock. If we are unable to raise additional capital or enter into such arrangements when needed, we could be forced to delay, limit, reduce or terminate our research and development programs or future commercialization efforts, or grant rights to develop and market our product candidates even if we would otherwise prefer to develop and market such product candidates ourselves.

The manufacturing of our cell therapy products is novel and complex, and we have invested substantial resources to optimize the manufacturing process of our product candidates, including selection and optimization of cord blood units, establishing cold chain supply logistics and leveraging the cGMP manufacturing facility of GC Cell to expand NK cells and create our product candidates. We also currently operate manufacturing facilities at our leased facility in San Diego, California to support NK and CAR-NK cell production for our pipeline development and clinical trial (and potentially commercial) supply. We also currently rely on other third-parties to ship and store our cord blood units and drug product lots, viral vectors and master and working feeder cell banks, as well as other components used in the manufacturing process for our product candidates, and we expect to continue to do so to meet our preclinical, clinical, and potential commercial activities. We expect that we and GC Cell will be capable of providing and processing sufficient quantities of our product candidates to meet anticipated clinical trial demands cost-effectively. However, any disruption in the supply or manufacture of our product candidates could result in delays in our preclinical studies and clinical trials and increase the costs of our research and development activities. We plan to continue to invest in our manufacturing capability and cryopreservation techniques to continuously improve our production and supply chain capabilities over time.

Financial Operations Overview

License and Collaboration Agreements

Below is a summary of the key terms for certain of our license and collaboration agreements. For a more detailed description of these agreements, see the section titled “Business—License and Collaboration Agreements.”

GC Cell and Related Agreements

We have entered into several agreements with GC Cell and related entities concerning our NK cell therapy platform and manufacturing of our core products, as described below.

Option and License Agreement with GC Cell

In September 2019, we entered into an option and license agreement with GC Cell, formerly Green Cross Cell Corporation, as amended in June 2020 and February 2022 (the Core Agreement). Under the Core Agreement, GC Cell granted us an exclusive, royalty-bearing license, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell relating to non-genetically modified and genetically modified NK cells, and culturing, engineering, manufacturing thereof, to research, develop, manufacture, and commercialize NK cell pharmaceutical products in the Artiva Territory, which is anywhere in the world except for Asia, Australia, and New Zealand. GC Cell retained rights under the license to allow it and its affiliates to perform obligations under the Core Agreement and other agreements between us and them.

Under the Core Agreement, GC Cell agreed to conduct a discovery, research, preclinical development, and manufacturing program under a plan approved by a Joint Steering Committee (the JSC), to generate and identify product candidates for nomination as option candidates. GC Cell will bear all costs for its work under the R&D Plan, except that Artiva will bear all costs for completing IND-enabling activities performed by GC Cell on behalf of Artiva, other than certain efficacy studies.

For each product candidate determined by the JSC to be an option candidate, we have an exclusive option under the Core Agreement to obtain an exclusive, sublicensable license to research, develop, manufacture and commercialize such candidate in the Artiva Territory for any therapeutic, prophylactic or diagnostic uses in humans, on economic terms to be determined in good faith by the parties. GC Cell retains exclusive rights to the licensed technology in Asia, Australia, and New Zealand, though we have the right to request, and GC Cell has agreed to consider in good faith, inclusion of Australia, New Zealand and/or specific countries in Asia in the Artiva Territory on a product-by-product basis. If we elect not to exercise the option with respect to a particular option candidate, GC Cell retains the right to continue development of such candidate. As of March 31, 2024, we have exercised our rights to license four option candidates, including AlloNK (AB-101), AB-201 and AB-205, as described below.

We have control over and will bear the costs of the development, regulatory, manufacturing and commercialization activities relating to the option candidates for which we have exercised our option, each a licensed product. Accordingly, we have certain diligence obligations and must use commercially reasonable efforts to develop and seek regulatory approval for each licensed product in at least one indication in the United States and the European Union, and following regulatory approval in a country, to commercialize such licensed product in at least one indication in such country. The Core Agreement provides that we have the right to engage GC Cell or its appropriate affiliate to provide research and manufacturing services for the licensed products being developed by us in the Artiva Territory under separately executed service agreements.

Under the Core Agreement, we are obligated to pay a low single-digit percentage royalty on net sales of any licensed products, the manufacture, use or sale of which is claimed by or uses any Core IP. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We also have the exclusive option to extend our license to the Core IP to be worldwide with respect to products originated from us in exchange for a specified increase in the applicable royalty. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. As of March 31, 2024, we have not recognized any net sales royalties under this agreement.

[Table of Contents](#)

AB-101 Selected Product License Agreement

In November 2019, we entered into a license agreement with GC Cell for our AB-101 product candidate, as amended in February 2022 (the AB-101 Agreement). AB-101 is the first product for which we exercised our option under the Core Agreement. Under the AB-101 Agreement, GC Cell granted us an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture and commercialize AB-101.

Under the AB-101 Agreement, we are obligated to pay tiered royalties in the low-mid to high single-digit percentage range on annual net sales of any licensed AB-101 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-101 product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We are also obligated to make milestone payments to GC Cell of: (1) up to \$22.0 million upon the first achievement of certain development milestones; and (2) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-101 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. As of March 31, 2024, we have not recognized any net sales royalties or milestones under this agreement.

AB-201 Selected Product License Agreement

In October 2020, we entered into a license agreement with GC Cell for our AB-201 product candidate, as amended in February 2022 (the AB-201 Agreement). AB-201 is the second product for which we exercised our option under the Core Agreement. Under the AB-201 Agreement, GC Cell granted us an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture and commercialize AB-201.

Under the AB-201 Agreement, we are obligated to pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-201 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-201 product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We are also obligated to make milestone payments to GC Cell of: (1) up to \$25.0 million upon the first achievement of certain development milestones; and (2) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-201 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property.

In September 2023, we entered an amendment to the AB-201 Agreement (the Amended AB-201 Agreement). This amendment granted back GC Cell an exclusive, royalty and milestone bearing license to all information and patents controlled by us that relate specifically to the research, development, manufacture and use of AB-201, to be used outside of the Artiva Territory. Under the Amended AB-201 Agreement, we will receive tiered royalties in the low single-digit percentage range on annual GC Cell net sales of AB-201 outside of the Artiva Territory. The royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of AB-201 outside of the Artiva Territory and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We will also receive milestone payments upon achievement of certain development milestones, totaling \$1.8 million. In December 2023, GC Cell achieved the first regulatory milestone under the Amended AB-201 Agreement for first IND acceptance for AB-201 outside the Artiva Territory.

[Table of Contents](#)

License and development support-related revenue recognized in the condensed statements of operations and comprehensive loss, related to GC Cell's development support activities under the Amended AB-201 Agreement, was \$0 and \$0.6 million during the years ended December 31, 2022 and 2023, respectively, and \$0 and \$0.3 million during the three months ended March 31, 2023 and 2024, respectively.

AB-205 Selected Product License Agreement

In December 2022, we entered into a license agreement with GC Cell for its AB-205 product candidate (the AB-205 Agreement). AB-205 is the fourth product for which we exercised our option under the Core Agreement. Under the AB-205 Agreement, GC Cell granted us an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture and commercialize AB-205.

Under the AB-205 Agreement, we are obligated to pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-205 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-205 product and continuing until the later of (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. Upon our election to proceed with clinical development of AB-205 (prior to which we may not make, use or sell AB-205 for clinical development purposes), we are obligated to pay a one-time payment of \$2.5 million to GC Cell. Thereafter, we are also obligated to make milestone payments to GC Cell of: (i) up to \$29.5 million upon the first achievement of certain development milestones, excluding any payments for the Development Cost Share as defined in the AB-205 Agreement; and (ii) up to \$28 million upon the first achievement of certain sales milestones. As of March 31, 2024, we have not recognized any net sales royalties or milestones under this agreement.

Total reimbursements for development costs invoiced to GC Cell in connection with the AB-205 License Agreement were \$0 and \$1.6 million for the years ended December 31, 2022 and 2023, respectively, and \$0 and \$0.1 million for the three months ended March 31, 2023, and 2024, respectively. Through March 31, 2024, we received \$1.0 million in payments from GC Cell.

Research Services Agreement with GC Cell

As contemplated by the Core Agreement, in August 2020 we entered into the GC Cell Research Services Agreement, as amended in February 2022, under which GC Cell agreed to provide research services in support of the research and development of one or more of the products we have licensed from GC Cell. The Agreement provides that the parties will agree to specific projects as work orders under the GC Cell Research Services Agreement. Each work order shall set forth, upon terms mutually agreeable to GC Cell and us, the specific services to be performed by GC Cell, the timeline and schedule for the performance of the services, and the compensation to be paid by us to GC Cell for the provision of such services, as well as any other relevant terms and conditions.

Master Manufacturing Agreement with GC Cell

In March 2020, we entered into a Master Agreement for Manufacturing Services (the Manufacturing Agreement) with GC Cell, under which GC Cell agreed to manufacture specified products under individual work orders for use in our Phase 1 and Phase 2 clinical trials. Each work order will contain an estimated budget of service fees and out-of-pocket costs to be incurred in the performance of services under the agreement and the work order, as well as additional terms and conditions relating to the estimated budget. We will own all results and data generated by GC Cell under the Manufacturing Agreement.

Merck Exclusive License and Collaboration Agreement

In January 2021, we entered into the Exclusive License and Research Collaboration Agreement (the Merck Collaboration Agreement) with Merck Sharp & Dohme Corp. (Merck) for the discovery, development, manufacture and commercialization of CAR-NK cells that target certain solid tumor antigens. Merck paid us \$30.0 million upfront for two target programs under the Merck Collaboration Agreement. We are also eligible to receive additional payments for achieving certain development, regulatory approval and sales milestones, as well as royalties on net sales. In addition, we will be reimbursed for the conduct of each research program, including external research costs and manufacture and supply of clinical material for Phase 1 clinical trials.

[Table of Contents](#)

Concurrent with entering into the Merck Collaboration Agreement, we also entered into an agreement with GC Cell to obtain exclusive, worldwide rights to GC Cell's CAR-NK technology with respect to the licensed products and to engage GC Cell to perform services in support of the research programs (the Partnered Program License Agreement). We have agreed to reimburse GC Cell for research and development services as these services are provided. Artiva is required to pay GC Cell 100% of regulatory milestones, sales milestones and royalty payments received by Merck relating to products in Asia, Australia, and New Zealand and 50% of upfront payments, license fees, regulatory milestones, sales milestones and royalty payments received by Merck relating to products in all other territories.

In October 2023, the Merck Collaboration Agreement and development thereunder was terminated by Merck.

Affimed Collaboration Agreement

On November 1, 2022, we entered into a strategic collaboration agreement with Affimed GmbH, a subsidiary of Affimed N.V. for the clinical development and commercialization of a combination therapy, for any uses in humans or animals, comprising Affimed's product consisting of an innate cell engager referred to as "AFM13" our product containing an NK cell referred to as AB-101. While the collaboration is initially limited to the United States, the parties will, upon Affimed's request, in good faith discuss an expansion to certain other territories.

We have granted Affimed, with respect to the development of the combination therapy an exclusive, and with respect to the promotion of the combination therapy under the Affimed Collaboration Agreement a non-exclusive, non-transferable (except to affiliates and successors in interest), royalty-free and non-sublicensable (with certain exceptions) license under relevant patents and know-how. Affimed has granted us a non-exclusive, non-transferable (except to affiliates and successors in interest), royalty-free license and non-sublicensable (with certain exceptions) license under relevant Affimed patents and know-how for use in the clinical development of the combination therapy under the Affimed Collaboration Agreement.

The financial terms of the Affimed Collaboration Agreement provides that Affimed shall be responsible for all costs associated with the development of the combination therapy (including all clinical trial costs), except that Affimed and we shall each bear 50% of the costs and expenses incurred in connection with the performance of any confirmatory combination therapy clinical trial required by the FDA. We shall be solely responsible for all costs incurred by us for the supply of AB-101 and IL-2 product used in the clinical trials for the combination therapy, and for carrying out activities assigned to it under the agreed development plan. In addition, under the Affimed Collaboration Agreement, the parties agree to make payments to each other to achieve a proportion of 67%/33% (Affimed/Company) of revenues generated by both parties from commercial sales of each party's product as part of the combination therapy.

Expenses incurred in connection with the Affimed Collaboration Agreement were \$0 and \$0.9 million during the years ended December 31, 2022 and 2023, respectively, and \$0.7 million and \$0 during the three months ended March 31, 2023 and 2024, respectively.

Components of Results of Operations

Collaboration Revenue

As of March 31, 2024, we have not generated any revenues from product sales or royalties. Our revenues have been derived from the Merck Collaboration Agreement and the AB-201 Agreement.

In January 2021, we entered into the Merck Collaboration Agreement which was subsequently terminated in October 2023, pursuant to which we received an upfront, non-refundable and non-creditable payment of \$30.0 million for two target programs, with an additional \$15.0 million payable by Merck if we and Merck agreed upon a third collaboration target.

Additionally, we were entitled to be reimbursed for the conduct of each research program, including external research costs and manufacture and supply of clinical materials for Phase 1 clinical trials, up to \$14.0 million per program.

We concluded that Merck represented a customer and in accordance with Accounting Standards Codification (ASC) 606, we determined that the initial transaction price under the Merck Collaboration Agreement equals \$58.0 million, consisting of the upfront, non-refundable and non-creditable payment of \$30.0 million and the aggregate estimated research and development fees of \$28.0 million. The initial transaction price was allocated

[Table of Contents](#)

evenly to each of the two product targets. In addition, we identified our performance obligations under the Merck Collaboration Agreement, including our grant to Merck of a license to certain of our intellectual property subject to certain conditions, our conduct of research services, and our participation in a joint research committee. We determined that all performance obligations should be accounted for as one combined performance obligation for each target program, and that since no individual performance obligation is distinct, and that the combined performance obligation is transferred over the expected term of the conduct of the research services, which is estimated to be four years which represents the combined terms for the research programs. Upon termination of the Merck Collaboration Agreement, we recognized the remaining portion of the upfront, non-refundable \$30.0 million in revenue.

Collaboration revenues recognized under the Merck Collaboration Agreement were \$4.9 million and \$32.9 million for the years ended December 31, 2022 and 2023, respectively, and \$1.0 million during the three months ended March 31, 2023.

License and Development Support Revenue

License and development support-related revenues related to GC Cell's development support activities under the Amended AB-201 Agreement were \$0 and \$0.6 million for the years ended December 31, 2022 and 2023, respectively, and \$0 and \$0.3 million during the three months ended March 31, 2023 and 2024, respectively.

Operating Expenses

Our operating expenses consist of (i) research and development expenses and (ii) general and administrative expenses.

Research and Development

Our research and development expenses consist primarily of external and internal costs related to the development of product candidates.

External costs include:

- expenses incurred in connection with research, laboratory consumables and preclinical studies;
- expenses incurred in connection with conducting clinical trials including investigator grants and site payments for time and pass-through expenses and expenses incurred under agreements with CROs other vendors or central laboratories and service providers engaged to conduct our trials;
- the cost of consultants engaged in research and development related services and the cost to manufacture cell therapy product candidates for use in our clinical trials and preclinical studies;
- costs related to regulatory compliance; and
- the cost of annual license fees.

Internal costs include:

- personnel-related expenses, including salaries and related benefits, travel and stock-based compensation expenses for personnel engaged in research and development functions; and
- facilities, depreciation, and other expenses, which include allocated expenses for rent and maintenance of facilities, insurance and supplies.

Research and development expenses are recognized as incurred and payments made prior to the receipt of goods or services to be used in research and development are capitalized until the goods or services are received. We track outsourced development, outsourced personnel costs and other external research and development costs of specific programs. We do not track our internal research and development costs on a program-by-program basis because these costs are associated with multiple programs and, as such, are not separately classified.

Research and development activities are central to our business model. There are numerous factors associated with the successful commercialization of any of our product candidates, including future trial design and various regulatory requirements, many of which cannot be determined with accuracy at this time based on our stage of development. In addition, future regulatory factors beyond our control may impact our development programs. Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials.

[Table of Contents](#)

At this time, we cannot reasonably estimate or know the nature, timing and costs of the efforts that will be necessary to complete the preclinical and clinical development of any of our product candidates. However, we expect that our research and development expenses will increase substantially in connection with our planned preclinical and clinical development activities in the near term and in the future.

The successful development of our product candidates is highly uncertain. This is due to numerous risks and uncertainties, including the following:

- successful completion of preclinical studies and clinical trials and the results therefrom;
- delays in regulators or institutional review boards authorizing us or our investigators to commence our clinical trials or in our ability to negotiate agreements with clinical trial sites or CROs;
- the number of clinical sites included in the trials;
- our reliance on third parties for the manufacturing our product candidates;
- having sufficient capital to complete clinical development of our product candidates which in some cases may require additional funds;
- obtaining and maintaining patent, trade secret and other intellectual property protection and regulatory exclusivity for our product candidates; and
- protecting and enforcing our rights in our intellectual property.

We may never succeed in obtaining regulatory approval for any of our product candidates.

We expect that our research and development expenses will increase substantially for the foreseeable future as we continue the development of our product candidates. We cannot determine with certainty the timing of initiation, the duration or the completion costs of current or future clinical trials and preclinical studies of our current or future product candidates due to the inherently unpredictable nature of clinical and preclinical development. Clinical and preclinical development timelines, the probability of success and development costs can differ materially from expectations. In addition, we cannot forecast which product candidates may be subject to future collaborations, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

Our future development costs may vary significantly based on factors such as:

- the number and scope of preclinical and IND-enabling studies;
- the number of clinical trials required for approval;
- the number of sites included in the clinical trials;
- the countries in which the trials are conducted;
- the length of time required to enroll eligible patients;
- the number of patients that participate in the clinical trials;
- the number of doses evaluated in the clinical trials;
- the costs of manufacturing our product candidates, including the costs of building our own manufacturing facility;
- the drop-out or discontinuation rates of patients;
- potential additional safety monitoring requested by regulatory agencies;
- the duration of patient participation in the clinical trials and follow-up;
- the phase of development of the product candidate; and
- the efficacy, safety and tolerability profile of the product candidate.

A change in the outcome of any of these variables with respect to the development of our product candidates may significantly impact the costs and timing associated with the development of our product candidates.

General and Administrative

General and administrative expenses consist of personnel-related expenses, including salaries and related benefits, travel and stock-based compensation expenses for personnel engaged in executive, finance and other administrative functions. Other significant costs include facilities-related costs, legal fees relating to intellectual property and

[Table of Contents](#)

corporate matters, professional fees for accounting and consulting services and insurance costs. We expect that our general and administrative expenses will increase substantially for the foreseeable future to support our continued research and development activities, pre-commercial preparation activities for our product candidates, and, if any product candidate receives marketing approval, commercialization activities. Following the completion of this offering, we also anticipate increased expenses related to audit, legal, regulatory and tax-related services associated with maintaining compliance with exchange listing and SEC requirements, director and officer insurance premiums and investor relations costs associated with operating as a public company.

Interest Income

Interest income consists of interest on our money market fund and short-term investments.

Change in Fair Value of Simple Agreement for Future Equity

In 2023, we issued \$24.4 million of SAFEs to various existing investors and related parties. The SAFEs are recorded as liabilities at fair value and remeasured at fair value at each reporting period. The change in fair value for the period is recorded in change in fair value of SAFEs in the statements of operations.

Other Income (Expense), Net

Other income (expense), net consists primarily of realized gains and losses on short-term investments.

Income Taxes

We are subject to corporate U.S. federal and state income taxation. As of December 31, 2022, and 2023, we had federal net operating loss (NOL) carryforwards of \$48.8 million and \$73.0 million, respectively, and state NOL carryforwards of \$49.1 million and \$91.2 million, respectively. As a result of the Tax Cuts and Jobs Act of 2017, for U.S. income tax purposes, NOLs generated prior to 2018 can be carried forward for up to 20 years, while NOL carryforwards generated after December 31, 2017 can be carried forward indefinitely, but are limited to 80% utilization against future taxable income each year.

Utilization of the NOL carryforwards may be subject to a substantial annual limitation due to the ownership change limitations provided by the Code and similar state provisions. This annual limitation may result in the expiration of NOL carryforwards and credits before utilization. We have not performed an analysis to determine the limitation of our NOL carryforwards.

We estimate our income tax provision, including deferred tax assets and liabilities, based on management's judgment. We record a valuation allowance to reduce our deferred tax assets to the amounts that are more likely than not to be realized. We consider future taxable income, ongoing tax planning strategies and our historical financial performance in assessing the need for a valuation allowance. If we expect to realize deferred tax assets for which we have previously recorded a valuation allowance, we will reduce the valuation allowance in the period in which such determination is first made.

We record liabilities related to uncertain tax positions in accordance with the guidance that clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements by prescribing a minimum recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return.

As of December 31, 2022, and 2023, we had gross unrecognized tax benefits of \$2.9 million and \$4.0 million, respectively, all of which would affect our income tax expense if recognized, before consideration of our valuation allowance. As of December 31, 2023, we do not expect our unrecognized tax benefits will significantly change over the next 12 months.

Results of Operations

Comparison of the Years Ended December 31, 2022 and 2023

The following table summarizes our results of operations for the years ended December 31, 2022 and 2023 (in thousands):

	YEAR ENDED DECEMBER 31,		CHANGE
	2022	2023	
Revenue:			
Collaboration revenue	\$ 4,931	\$ 32,923	\$27,992
License and development support revenue	—	569	569
Total revenue	4,931	33,492	28,561
Operating expenses:			
Research and development	43,984	50,251	6,267
General and administrative	20,776	13,912	(6,864)
Total operating expenses	64,760	64,163	(597)
Loss from operations	(59,829)	(30,671)	29,158
Other income:			
Interest income	1,294	2,535	1,241
Change in fair value of SAFEs	—	(707)	(707)
Other income (expense), net	(200)	195	395
Total other income, net	1,094	2,023	929
Loss before provision for income taxes	(58,735)	(28,648)	30,087
Provision for income taxes	(53)	(72)	(19)
Net loss	<u>\$(58,788)</u>	<u>\$(28,720)</u>	<u>\$30,068</u>
Unrealized gain on short-term investments	—	308	308
Comprehensive loss	<u>\$(58,788)</u>	<u>\$(28,412)</u>	<u>\$30,376</u>

Collaboration Revenue. Collaboration revenues were \$4.9 million for the year ended December 31, 2022, compared to \$32.9 million for the year ended December 31, 2023. Revenues were related to the Merck Collaboration Agreement, which we executed in January 2021 and was terminated in October 2023. The increase of \$28.0 million was due to the recognition of \$24.0 million of unrecognized revenue from the deferred upfront payment in connection with the termination of the Merck Collaboration Agreement, and an increase of \$4.0 million in reimbursement revenues.

License and Development Support Revenues. License and development support revenues were \$0 for the year ended December 31, 2022, compared to \$0.6 million for the year ended December 31, 2023. Revenues were related to the achievement of a research related milestone, and development support activities, under the AB-201 Agreement with GC Cell.

[Table of Contents](#)

Research and Development Expenses. We track outsourced development, outsourced personnel costs and other external research and development costs of specific programs. We do not track our internal research and development costs on a program-by-program basis. The following table summarizes our research and development expenses for the years ended December 31, 2022 and 2023 (in thousands):

	YEAR ENDED DECEMBER 31,	
	2022	2023
External research and development expense:		
AB-101	\$ 7,265	\$14,090
AB-201	6,457	320
Merck 1	1,890	1,881
Merck 2	52	424
Other programs	2,481	1,172
Internal research and development expense:		
Personnel-related	22,086	28,806
Other	3,753	3,558
Total research and development expense	<u>\$43,984</u>	<u>\$50,251</u>

Research and development expenses were \$44.0 million for the year ended December 31, 2022, compared to \$50.3 million for the year ended December 31, 2023. The increase of \$6.3 million was primarily due to a \$6.5 million increase in internal research and development expense, offset by a \$0.2 million decrease in external research and development expense. The \$0.2 million decrease in external research and development expense is primarily due to decreases of \$6.1 million of AB-201 costs related to product development and a decrease of \$1.3 million in other external programs costs as we narrowed our research focus to our target AB-101 programs. These decreases were partially offset by an increase of \$6.8 million in expenses related to AB-101 product candidate development, clinical trials, and the initiation of our autoimmune trial, and a \$0.4 million increase in expenses related to our Collaboration Agreement with Merck. The \$6.5 million increase in internal research and development expense is primarily due to a \$6.7 million increase in personnel-related expenses supporting our additional headcount as we expanded the number of research and development employees to support our programs, inclusive of an increase of \$0.7 million of non-cash stock-based compensation expense, offset by a \$0.2 million decrease in other operating costs.

General and Administrative Expenses. General and administrative expenses were \$20.8 million for the year ended December 31, 2022, compared to \$13.9 million for the year ended December 31, 2023. The decrease of \$6.9 million for the year ended December 31, 2023, was primarily comprised of a \$3.9 million decrease for the write-off of deferred offering costs in 2022, a \$2.5 million decrease in personnel-related expenses including non-cash stock-based compensation, and a \$0.5 million decrease in legal expenses. The decrease in personnel-related costs included a decrease of \$2.2 million in operating costs and a decrease of \$0.3 million of non-cash stock-based compensation expense due to decreased general and administrative headcount and recruiting costs as a result of the reduction in work force in March 2023.

Other Expense (Income), Net. Other income, net was \$1.1 million for the year ended December 31, 2022, compared to \$2.0 million for the year ended December 31, 2023. The increase of \$0.9 million was primarily due to a \$1.2 million increase in dividend and interest income from additional short-term investments purchased in 2023, partially offset by a \$0.7 million expense for the change in fair value of SAFEs, a \$0.3 million increase in other expenses and foreign exchange rate losses, and a \$0.1 million realized loss on short-term investments.

Provision for Income Taxes. The provision for income taxes was \$0.1 million for the year ended December 31, 2022, compared to \$0.1 million for the year ended December 31, 2023, resulting in no change year over year.

[Table of Contents](#)

Unrealized Gain (Loss) on Short-Term Investments. Unrealized gain (loss) on short-term investments was \$0 for the year ended December 31, 2022, compared to \$0.3 million for the year ended December 31, 2023. The increase of \$0.3 million in the year ended December 31, 2023 was primarily due to the change in fair value of available-for-sale securities purchased in the year ended December 31, 2023.

Comparison of the Three Months Ended March 31, 2023 and 2024

The following table summarizes our results of operations for the three months ended March 31, 2023 and 2024 (in thousands):

	THREE MONTHS ENDED MARCH 31,		CHANGE
	2023	2024	
Revenue:			
Collaboration revenue	\$ 989	\$ —	\$ (989)
License and development support revenue	—	251	251
Total revenue	989	251	(738)
Operating expenses:			
Research and development	14,771	11,156	(3,615)
General and administrative	3,906	3,587	(319)
Total operating expenses	18,677	14,743	(3,934)
Loss from operations	(17,688)	(14,492)	3,196
Other income:			
Interest income	1,024	650	(374)
Change in fair value of SAFEs	—	(268)	(268)
Other income (expense), net	(53)	147	200
Total other income, net	971	529	(442)
Net loss	<u>\$(16,717)</u>	<u>\$(13,963)</u>	<u>\$ 2,754</u>
Unrealized loss on short-term investments	—	(101)	(101)
Comprehensive loss	<u>\$(16,717)</u>	<u>\$(14,064)</u>	<u>\$ 2,653</u>

Collaboration Revenues. Collaboration revenues were \$1.0 million for the three months ended March 31, 2023, compared to \$0 for the three months ended March 31, 2024. Revenues were related to the Merck Collaboration Agreement, which we executed in January 2021 and terminated in October 2023. The decrease of \$1.0 million was due to the termination of the Merck Collaboration Agreement in 2023.

License and Development Support Revenues. License and development support revenues were \$0 for the three months ended March 31, 2023, compared to \$0.3 million for the three months ended March 31, 2024. Revenues were related to development support activities under the AB-201 Agreement with GC Cell.

[Table of Contents](#)

Research and Development Expenses. We track outsourced development, outsourced personnel costs and other external research and development costs of specific programs. We do not track our internal research and development costs on a program-by-program basis. The following table summarizes our research and development expenses for the three months ended March 31, 2023 and 2024 (in thousands):

	THREE MONTHS ENDED MARCH 31,	
	2023	2024
External research and development expense:		
AB-101	\$ 3,632	\$ 3,289
AB-201	199	47
Merck 1	257	—
Merck 2	19	—
Other programs	613	—
Internal research and development expense:		
Personnel-related	6,070	4,740
Other	3,981	3,080
Total research and development expense	<u>\$ 14,771</u>	<u>\$ 11,156</u>

Research and development expenses were \$14.8 million for the three months ended March 31, 2023, compared to \$11.2 million for the three months ended March 31, 2024. The decrease of \$3.6 million was primarily due to a \$2.2 million decrease in internal research and development expense and a \$1.4 million decrease in external research and development expense. The \$2.2 million decrease in internal research and development expense is primarily due to a \$1.3 million decrease in personnel-related expenses, inclusive of a decrease of \$0.2 million of non-cash stock-based compensation expense, as a result of the reduction in work force in March 2023, in addition to a \$0.9 million decrease in other operating costs. The \$1.4 million decrease in external research and development expense is primarily due to decreases of \$0.6 million and \$0.2 million in other programs and our AB-201 program, respectively, as we narrowed our research focus to our AB-101 programs, \$0.3 million in expenses related to AB-101 product candidate development and clinical trials as we progressed towards the end of our clinical trial for the B-NHL program and commenced our clinical trial on the AlloNK for LN program, and \$0.3 million in expenses related to our Collaboration Agreement with Merck as the agreement was terminated in October 2023.

General and Administrative Expenses. General and administrative expenses were \$3.9 million for the three months ended March 31, 2023, compared to \$3.6 million for the three months ended March 31, 2024. The decrease of \$0.3 million for the three months ended March 31, 2024, is primarily comprised of a \$0.8 million decrease in personnel-related expenses, which includes a \$0.2 million decrease in stock-based compensation expense, partially offset by an increase of \$0.4 million in operating costs and \$0.1 million in legal costs. The decrease in personnel-related costs is due to a decreased general and administrative headcount as a result of the reduction in work force in March 2023.

Other Income (Expense), Net. Other income (expense), net was \$1.0 million for the three months ended March 31, 2023, compared to \$0.5 million for the three months ended March 31, 2024. The decrease of \$0.5 million was primarily due to a \$0.4 million decrease in dividend and interest income due to a lower investment balance during 2024, a \$0.3 million increase in expense for the change in fair value of SAFEs, partially offset by a \$0.2 million decrease in other expenses and foreign exchange rate losses.

Unrealized Gain (Loss) on Short-Term Investments. Unrealized gain (loss) on short-term investments was \$0 for the three months ended March 31, 2023, compared to \$(0.1) million for the three months ended March 31, 2024. The decrease of \$0.1 million in the three months ended March 31, 2024 was primarily due to the change in fair value of available-for-sale securities purchased subsequent to March 31, 2023.

Liquidity and Capital Resources

Sources of Liquidity

We have incurred net losses and negative cash flows from operations since our inception and expect to continue to incur significant and increasing operating losses for the foreseeable future. We have never generated any revenue from product sales and do not expect to generate any revenues from product sales unless and until we successfully complete development of and obtain regulatory approval for our product candidates, which will not be for several years, if ever. In addition, if we obtain regulatory approval for any of our product candidates, we expect to incur significant commercialization expenses related to product sales, marketing, manufacturing and distribution. From our inception through March 31, 2024, we have raised aggregate gross proceeds of \$222.4 million to fund our operations, comprised primarily from our issuance of convertible promissory notes, SAFEs and private placements of our convertible preferred stock. In February 2021, we received a \$30.0 million upfront payment from Merck for our two target programs. In addition, as of March 31, 2024, we have received \$9.9 million related to reimbursable research services from Merck. As of March 31, 2024, we had cash, cash equivalents and short-term investments of \$62.1 million and an accumulated deficit of \$195.3 million.

Future Funding Requirements

The financial statements included elsewhere in this prospectus have been prepared on a going concern basis, which contemplates the realization of assets and settlement of liabilities in the normal course of business, and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or amounts and classification of liabilities that may result from the outcome of this uncertainty. However, based on our current operating plan, we estimate that our existing cash, cash equivalents and short-term investments as of the date of this prospectus, together with the estimated net proceeds from this offering, will be sufficient to fund our operating expenses and capital expenditures through . This estimate is a forward-looking statement that involves risks and uncertainties, and actual results could vary materially. We have based this estimate on assumptions that may prove to be wrong, and we could deplete our capital resources sooner than we expect.

We have recurring net losses, which have resulted in a net loss of \$14.0 million and generated negative operating cash flow of \$15.1 million for the three months ended March 31, 2024. These factors raise substantial doubt about our ability to continue as a going concern for one year from the issuance of the financial statements. Our ability to continue as a going concern is dependent on our ability to further implement our business plan, raise capital, and generate revenues. The financial statements do not include any adjustments that might be necessary if we are unable to continue as a going concern.

Our future capital requirements will depend on many factors, including:

- the initiation, type, number, scope, results, costs and timing of, our ongoing and planned clinical trials of AlloNK and preclinical studies and initiation of clinical trials for future product candidates, including feedback received from regulatory authorities;
- the costs and timing of manufacturing for our product candidates, including the costs and timing of maintaining our own manufacturing facility, and commercial scale manufacturing if any product candidate is approved;
- the potential expansion of our current development programs to seek new indications;
- the costs, timing and outcome of regulatory review of current or future product candidates;
- the costs of obtaining, maintaining and enforcing our patents and other intellectual property rights;
- our efforts to enhance operational systems and hire additional personnel to satisfy our obligations as a public company, including enhanced internal controls over financial reporting;
- the costs associated with hiring additional personnel and consultants as our business grows, including additional executive officers and clinical development personnel;
- the terms and timing of establishing and maintaining collaborations, licenses and other similar arrangements;
- the timing and amount of the milestone or other payments we must make to current and future collaborators and licensors;
- the costs and timing of establishing or securing sales and marketing capabilities if current or future product candidate is approved in a region where we choose to commercialize the product on our own;

[Table of Contents](#)

- our ability to achieve sufficient market acceptance, coverage and adequate reimbursement from third-party payors and adequate market share and revenue for any approved products;
- patients' willingness to pay out-of-pocket for any approved products in the absence of coverage and/or adequate reimbursement from third-party payors; and
- costs associated with any products or technologies that we may in-license or acquire.

Until such time as we can generate substantial revenue from sales of our product candidates, if ever, we expect to finance our cash needs through public or private equity or debt financings or other capital sources, which may include strategic collaborations and other strategic arrangements with third parties. However, we may not be able to raise additional funds or enter into such other arrangements when needed or on favorable terms, or at all. To the extent that we raise additional capital through the sale of equity or convertible debt securities, the ownership interest of our stockholders could be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect the rights of our common stockholders. Debt financing and equity financing, if available, may involve agreements that include covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise funds through collaboration or licensing arrangements with third parties or other strategic transactions, we may have to relinquish valuable rights to our intellectual property, future revenue streams, research programs, or product candidates or grant licenses on terms that may not be favorable to us and/or may reduce the value of our common stock. If we are unable to raise additional funds or enter into such arrangements when needed, we could be forced to delay, limit, reduce or terminate our research and development programs or future commercialization efforts, or grant rights to develop and market our product candidates even if we would otherwise prefer to develop and market such product candidates ourselves.

Cash Flows

Comparison of the Years Ended December 31, 2022, and 2023

The following table sets forth a summary of the net cash flow activity for the years ended December 31, 2022, and 2023 (in thousands):

	YEAR ENDED DECEMBER 31,	
	2022	2023
Net cash (used in) provided by:		
Operating activities	\$(50,829)	\$(47,430)
Investing activities	(6,299)	(25,975)
Financing activities	(1,264)	24,391
Net decrease in cash	<u>\$(58,392)</u>	<u>\$(49,014)</u>

Operating Activities

Net cash used in operating activities for the year ended December 31, 2022, was \$50.8 million, consisting primarily of our net loss incurred during the period of \$58.8 million, partially offset by \$11.9 million of non-cash charges and \$3.9 million of a net decrease in operating assets and liabilities. Non-cash charges consisted of \$6.6 million in stock-based compensation expense, \$4.1 million in write-off of deferred offering costs and \$1.2 million in depreciation and amortization expense. The net change in operating assets and liabilities related primarily to a \$2.4 million decrease in deferred revenue, a \$0.8 million dollar decrease in accrued expenses, a \$0.8 million increase in prepaid expenses and other current assets and a \$0.1 million increase in other balance sheet items, partially offset by increases of \$0.2 million in accounts payable.

Net cash used in operating activities for the year ended December 31, 2023, was \$47.4 million, consisting primarily of our net loss incurred during the period of \$28.7 million, partially offset by \$9.6 million of non-cash charges and \$28.3 million of a net decrease in operating assets and liabilities. Non-cash charges consisted primarily of \$7.1 million in stock-based compensation expense, \$2.3 million in depreciation and amortization expense, \$0.7 million in change in fair value of SAFEs and \$0.5 million of accretion of discounts on short-term investments. The net change in operating assets and liabilities related primarily to a \$26.5 decrease in deferred revenue, a

[Table of Contents](#)

\$1.2 million decrease in receivables, a \$0.9 million decrease in accrued expenses, and a \$0.4 million decrease in accounts payable, partially offset by decreases of \$0.5 million in prepaid expenses and other current assets and \$0.2 million of other balance sheet items.

Investing Activities

Net cash used in investing activities for the year ended December 31, 2022, was \$6.3 million related to purchases of property and equipment. Net cash used in investing activities for the year ended December 31, 2023, was \$26.0 million related to \$49.5 million of purchases of short-term investments and \$3.3 million related to purchases of property and equipment, partially offset by \$26.8 million in maturities of short-term investments.

Financing Activities

Net cash used in financing activities for the year ended December 31, 2022, was \$1.3 million, primarily related to \$1.6 million from cash paid in connection with deferred offering costs, partially offset by \$0.3 million of proceeds from stock option exercises.

Net cash provided by financing activities for the year ended December 31, 2023, was primarily \$24.4 million related to proceeds from issuance of SAFEs.

Comparison of the Three Months Ended March 31, 2023, and 2024

The following table sets forth a summary of the net cash flow activity for the three months ended March 31, 2023, and 2024 (in thousands):

	THREE MONTHS ENDED MARCH 31,	
	2023	2024
Net cash (used in) provided by:		
Operating activities	\$ (14,243)	\$ (15,086)
Investing activities	(1,862)	9,782
Financing activities	(12)	—
Net decrease in cash	<u>\$ (16,117)</u>	<u>\$ (5,304)</u>

Operating Activities

Net cash used in operating activities for the three months ended March 31, 2023, was \$14.2 million, consisting primarily of our net loss incurred during the period of \$16.7 million, partially offset by \$2.4 million of non-cash charges and \$0.1 million of a net increase in operating assets and liabilities. Non-cash charges consisted of \$1.8 million in stock-based compensation expense and \$0.6 million in depreciation and amortization expense. The net change in operating assets and liabilities related primarily to a \$0.5 million increase in accounts payable, a \$0.3 million increase in operating lease right-of-use assets and lease liabilities, a \$0.2 increase in accrued expenses and a \$0.1 increase in deferred revenue, offset by a \$0.8 million increase in receivables, and a \$0.2 million increase in prepaid expenses and other current assets.

Net cash used in operating activities for the three months ended March 31, 2024, was \$15.1 million, consisting primarily of our net loss incurred during the period of \$14.0 million and \$3.0 million of a net decrease in operating assets and liabilities, partially offset by \$1.9 million of net non-cash charges. Non-cash charges consisted primarily of \$1.4 million in stock-based compensation expense, \$0.6 million in depreciation and amortization expense and \$0.3 million in change in fair value of SAFEs, offset by \$0.4 million of accretion of discounts on short-term investments. The net change in operating assets and liabilities primarily related to a \$3.0 million decrease in accrued expenses and a \$1.0 million decrease in prepaid expense and other current assets, offset by a \$0.9 million decrease in accounts payable and a \$0.1 million decrease in other net balance sheet liabilities.

Investing Activities

Net cash used in investing activities for the three months ended March 31, 2023, was \$1.9 million related to purchases of property and equipment. Net cash provided by investing activities for the three months ended March 31, 2024, was \$9.8 million related to \$16.0 million in maturities of short-term investments, partially offset by \$6.2 million of purchases of short-term investments.

[Table of Contents](#)

Financing Activities

Net cash used in financing activities for the three months ended March 31, 2023 and 2024 was immaterial.

Contractual Obligations and Commitments

In addition to ongoing capital needs to fund our ongoing operations, our material cash requirements include the following contractual and other obligations.

We lease certain office space in San Diego, California, under a non-cancelable operating lease, with a term through December 2025 (the Executive Drive Lease). The lease commenced on December 23, 2019, with a six-year initial term and includes aggregate monthly payments to the lessor of approximately \$2.8 million. The Executive Drive Lease also provides for rent abatements and scheduled increases in base rent. In connection with the lease, we made a one-time cash security deposit in the amount of \$0.4 million, of which \$0.2 million was refunded in October 2021 and the remaining \$0.2 million is refundable at the end of the lease term and is included in long-term assets in the balance sheets. The Executive Drive Lease includes a renewal option, which includes an option to renew for five additional years. We will not exercise the option and, as such, is not reflected as part of the ROU asset and associated lease liabilities.

In June 2021, we entered into a lease agreement for corporate office and laboratory space in San Diego, California (the Morehouse Lease), which represented a portion of a new facility that was under construction. The Morehouse Lease includes multiple, successive commencement dates. The office and laboratory space commenced in the second quarter of 2022 and the third quarter of 2022 for the cGMP manufacturing center. The Morehouse Lease has an initial term of 88 months and includes aggregate monthly payments to the lessor of approximately \$23.2 million with a rent escalation clause, and a tenant improvement allowance of \$12.3 million. We are also required to maintain a cash security deposit in the form of an unconditional and irrevocable letter of credit of \$0.2 million which must remain in place until the termination of the lease and is considered a non-current asset as of March 31, 2024. These obligations are further described in Note 12 to our audited financial statements and Note 11 to our unaudited condensed financial statements appearing elsewhere in this prospectus.

In August 2022, we entered into a lease agreement to use designated laboratory and vivarium space in San Diego, California (the Explora Lease). The Explora Lease is accounted for as an operating lease and commenced in August 2022. The Explora Lease has an initial term of 36 months and includes aggregate monthly payments to the lessor of approximately \$0.8 million with a rent escalation clause.

On July 22, 2022, we entered into a sublease (the Sublease Agreement) with Origis Operating Services, LLC, (the Sublessee), whereby we agreed to sublease to Sublessee all of the 13,405 rentable square feet of office space in San Diego, CA currently leased by us under the Executive Drive Lease. The sublease commenced on August 1, 2022, and has a term through December 31, 2025. The aggregate base rent is approximately \$2.6 million commencing August 1, 2022. We record sublease income as a reduction of general and administrative expense. Upon execution of the Sublease Agreement, we received a cash security deposit of \$0.1 million from the Sublessee which is recorded as other non-current liabilities in the balance sheets.

As of March 31, 2024, we have future remaining operating lease payments of \$19.9 million relating to leases we have recognized in the condensed balance sheets, of which \$3.0 million is payable before December 31, 2024.

Under our collaboration agreements, we have milestone payment obligations that are contingent upon the achievement of specified development, regulatory and commercial sales milestones and are required to make certain royalty payments in connection with the sale of products developed under the agreement (see Note 8 to our financial statements included elsewhere in this prospectus). As of March 31, 2024, we are unable to estimate the timing or likelihood of achieving the milestones or making future product sales and, therefore, any related payments are not included in the table above.

We enter into contracts in the normal course of business for contract research services, contract manufacturing services, professional services and other services and products for operating purposes. These contracts generally provide for termination after a notice period, and, therefore, are cancelable contracts and not included in the table above.

Off-Balance Sheet Arrangements

We did not have, during the periods presented, and we do not currently have any off-balance sheet arrangements, as defined in the rules and regulations of the SEC.

Critical Accounting Policies and Significant Judgments and Estimates

Our financial statements are prepared in accordance with generally accepted accounting principles in the United States (GAAP). The preparation of our financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, costs, and expenses and the disclosure of contingent assets and liabilities in our financial statements and accompanying notes. We base our estimates and assumptions on historical experience and other factors that we believe to be reasonable under the circumstances. We evaluate our estimates and judgments on an ongoing basis. We base our estimates on historical experience, known trends and events, and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 2 to our financial statements, each appearing elsewhere in this prospectus, we believe that the following accounting policies are the most critical for fully understanding and evaluating our financial condition and results of operations.

Revenue Under Collaboration Agreements

We recognize research and development revenue from the Merck Collaboration Agreement. Collaboration agreements typically contain multiple elements, or performance obligations, including technology licenses or options to obtain technology licenses, research and development services, and manufacturing services. Upon entering into a collaboration agreement, we are required to make the following judgments:

- *Identifying the performance obligations contained in the agreement.* Our assessment of what constitutes a separate performance obligation requires the application of judgement. Specifically, we have to identify which goods and services we are required to provide under the contract are distinct.
- *Determining the transaction price, including any variable consideration.* To determine the transaction price, we review the amount of consideration eligible to earn under the agreement. We do not typically include any payments that may be received in the future in the initial transaction price since the payments are typically not probable because they are contingent upon certain future events. We are required to reassess the total transaction price at each reporting period to determine if additional payments should be included in the transaction price that have subsequently become probable.
- *Allocating the transaction price to each of the performance obligations.* When we allocate the transaction price to more than one performance obligation, we make estimates of the relative stand-alone selling price of each performance obligation because we do not typically sell our goods or services on a stand-alone basis. The estimate of the relative stand-alone selling price requires us in some cases to make significant judgements. For example, when delivering a license at the start of an agreement, we use valuation methodologies, such as the relief from royalty method, to value the license. Under this method we are required to make estimates, including: future sales, royalties on future product sales, contractual milestones, expenses, income taxes and discount rates. Additionally, when estimating the selling price for research and development services, we make estimates, including: the number of internal hours to be spent on the services, the cost of work we and third parties will perform, and the cost of clinical trial material to be used.

The research and development revenue we recognize each period is comprised of amortization from upfront payments and reimbursements for research services. Each of these types of revenue requires us to make various judgements and estimates. In October 2023, the Merck Collaboration Agreement and development thereunder was terminated by Merck.

Research and Development Expenses and Accrued Research and Development Costs

We are required to estimate our expenses resulting from obligations under contracts with vendors, consultants and CROs, in connection with conducting research and development activities. The financial terms of these contracts are subject to negotiations, which vary from contract to contract and may result in payment flows that do not match the periods over which materials or services are provided under such contracts. We reflect research and development

[Table of Contents](#)

expenses in our financial statements by matching those expenses with the period in which services and efforts are expended. We account for these expenses according to the progress of the preclinical or clinical study as measured by the timing of various aspects of the study or related activities. We determine accrual estimates through review of the underlying contracts along with preparation of financial models taking into account discussions with research and other key personnel as to the progress of studies, or other services being conducted.

Although we do not expect our estimates to be materially different from amounts actually incurred, if our estimates of the status and timing of services performed differ from the actual status and timing of services performed, it could result in us reporting amounts that are too high or too low in any particular period.

Fair Value of Simple Agreement for Future Equity

As described above, we have entered into SAFEs with various existing investors and related parties. The SAFEs granted investors with rights to participate in a future equity financing. The SAFEs have no maturity dates and bear no interest. The estimated fair value of the SAFEs is determined based on the aggregated, probability-weighted average of the outcomes of certain scenarios, including: (i) an equity financing, with conversion of the SAFEs into a number of shares of convertible preferred stock at the lower of the post-money valuation cap price of \$11.00 and the discount price (lowest price of the standard convertible preferred stock sold in the equity financing multiplied by the specified discount rate of 85%); (ii) an initial public offering, with conversion of the SAFEs into a number of shares of common stock equal to the purchase amount of the SAFE divided by the discount price (the lower of (a) the price per share of common stock sold to the public by the underwriters in the initial public offering multiplied by the discount rate of 85% or (b) the post-money valuation cap price of \$11.00); (iii) a liquidity event (change of control or direct listing) with mandatory conversion to common stock at the lower of the post-money valuation cap price of \$11.00 and the discount price (price of the common stock multiplied by the discount rate of 85%); and (iv) a dissolution event, with SAFEs holders automatically entitled to receive cash payments equal to the purchase amount, prior to and in preference to any distribution of any assets or surplus funds to the holders of convertible preferred and common stock. The combined value of the probability-weighted average of those outcomes is then discounted back to each reporting period in which the SAFEs are outstanding, in each case based on a risk-adjusted discount rate estimated based on the implied interest rate using the changes in observed interest rates of corporate debt that we believe is appropriate for those probability-adjusted cash flows.

SAFES are recorded as liabilities at fair value and remeasured at fair value at each reporting period. We record changes in fair value of all SAFES in changes in fair value of SAFES in the statements of operations and comprehensive loss. Debt issuance costs related to the SAFES were recorded as general and administrative expenses in the statements of operations and comprehensive loss as incurred.

Stock-Based Compensation Expense

Stock-based compensation expense represents the cost of the grant date fair value of employee, officer, director and non-employee stock options. We estimate the fair value of stock options on the date of grant using the Black-Scholes option pricing model and recognize the expense over the requisite service period of the awards, which is generally the vesting period, on a straight-line basis. We account for forfeitures when they occur and reverse any compensation cost previously recognized for awards for which the requisite service has not been completed, in the period that the award is forfeited.

The Black-Scholes option pricing model uses inputs which are highly subjective assumptions and generally require significant judgment. These assumptions include:

- ***Fair Value of Common Stock.*** See the subsection titled “Common Stock Valuation” below.
- ***Expected Term.*** The expected term represents the period that the options granted are expected to be outstanding. We have limited historical stock option activity and therefore estimate the expected term of stock options granted using the simplified method, which represents the arithmetic average of the original contractual term of the stock option and its weighted-average vesting term.
- ***Expected Volatility.*** The expected volatility of stock options is based upon the historical volatility of a number of publicly traded companies in similar stages of clinical development, as there is no active trading market for our common stock. We will continue to apply this process until a sufficient amount of historical information regarding the volatility of our own stock price becomes available.

[Table of Contents](#)

- **Risk-Free Interest Rate.** The risk-free interest rates used are based on the U.S. Treasury yield in effect at the time of grant for zero-coupon U.S. treasury notes with maturities approximately equal to the expected term of the stock options.
- **Expected Dividend Yield.** We have historically not declared or paid any dividends and do not currently expect to do so in the foreseeable future, and therefore have estimated the dividend yield to be zero.

See Note 9 to our financial statements included elsewhere in this prospectus for more information concerning certain of the specific assumptions we used in applying the Black-Scholes option pricing model to determine the estimated fair value of our stock options. Certain of such assumptions involve inherent uncertainties and the application of significant judgment. As a result, if factors or expected outcomes change and we use significantly different assumptions or estimates, our stock-based compensation could be materially different.

The intrinsic value of all outstanding options as of March 31, 2024, was \$ _____ million based on the assumed initial public offering price of \$ _____ per share (the midpoint of the price range set forth on the cover page of this prospectus), of which approximately \$ _____ million was related to vested options and approximately \$ _____ million was related to unvested options.

Common Stock Valuation

We are required to estimate the fair value of the common stock underlying our stock-based awards when performing fair value calculations using the Black-Scholes option pricing model. Because our common stock is not currently publicly traded, the fair value of the common stock underlying our stock-based awards has been determined on each grant date by our board of directors or our compensation committee, with input from management, considering our most recently available third-party valuation of common shares. All options to purchase shares of our common stock are intended to be granted with an exercise price per share no less than the fair value per share of our common stock underlying those options on the date of grant, based on the information known to us on the date of grant.

Our determination of the value of our common stock was performed using methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants (AICPA), *Audit and Accounting Practice Aid Series: Valuation of Privately Held Company Equity Securities Issued as Compensation* (the AICPA Practice Aid). In addition, our board of directors considered various objective and subjective factors to determine the fair value of our common stock, including:

- valuations of our common stock performed by independent third-party valuation specialists;
- the anticipated capital structure that will directly impact the value of the currently outstanding securities;
- our results of operations and financial position;
- the status of our research and development efforts;
- the composition of, and changes to, our management team and board of directors;
- the lack of liquidity of our common stock as a private company;
- our stage of development and business strategy and the material risks related to our business and industry;
- external market conditions affecting the life sciences and biotechnology industry sectors;
- U.S. and global economic conditions;
- the likelihood of achieving a liquidity event for the holders of our common stock, such as an IPO or a sale of our company, given prevailing market conditions; and
- the market value and volatility of comparable companies

The AICPA Practice Aid prescribes several valuation approaches for setting the value of an enterprise, such as the cost, income and market approaches, and various methodologies for allocating the value of an enterprise to its common stock. The cost approach establishes the value of an enterprise based on the cost of reproducing or replacing the property less depreciation and functional or economic obsolescence, if present. The income approach establishes the value of an enterprise based on the present value of future cash flows that are reasonably reflective of our future operations, discounting to the present value with an appropriate risk adjusted discount rate or capitalization rate. The market approach is based on the assumption that the value of an asset is equal to the value of a substitute asset with the same characteristics.

[Table of Contents](#)

In accordance with the AICPA Practice Aid, we considered the various methods for allocating the enterprise value to determine the fair value of our common stock at the valuation date. Under the option pricing method (OPM), shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The value of the common stock is inferred by analyzing these options. The probability weighted expected return method (PWERM) is a scenario-based analysis that estimates the value per share based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available to us, as well as the economic and control rights of each share class.

Based on our early stage of development and other relevant factors, we determined that an OPM method was the most appropriate method for allocating our enterprise value to determine the estimated fair value of our common stock for valuations performed prior to December 31, 2020. For valuations performed after that date and prior to December 31, 2022, we determined that a PWERM method was the most appropriate. Following the withdrawal of our related registration statement with the SEC on November 1, 2022, we determined that the OPM method was again the most appropriate method to determine the estimated fair value of our common stock for valuations performed after that date and prior to April 18, 2024. For the valuation performed on April 18, 2024 for stock options granted on May 2, 2024, we determined that a hybrid method that combines both OPM and PWERM was the most appropriate. In determining the estimated fair value of our common stock, our board of directors also considered the fact that our stockholders could not freely trade our common stock in the public markets. Accordingly, we applied discounts to reflect the lack of marketability of our common stock based on the weighted-average expected time to liquidity.

There are significant judgments and estimates inherent in the determination of the fair value of our common stock. These judgments and estimates include assumptions regarding our future operating performance, the time to completing an IPO or other liquidity event and the determination of the appropriate valuation methods. If we had made different assumptions, our stock-based compensation expense, net loss and net loss per share of common stock could have been significantly different.

Following the closing of this offering, the fair value of our common stock will be equal to the closing price of our common stock as reported on the date of the grant.

Emerging Growth Company and Smaller Reporting Company Status

As an emerging growth company under the Jumpstart Our Business Startups Act of 2012 (the JOBS Act), we can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an emerging growth company to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We have elected to use the extended transition period for complying with new or revised accounting standards and as a result of this election, our financial statements may not be comparable to companies that comply with public company effective dates. However, we may elect to early adopt any new or revised accounting standards whenever such early adoption is permitted for non-public companies. We may take advantage of these exemptions up until the time that we are no longer an emerging growth company.

We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year following the fifth anniversary of the consummation of this offering, (ii) the last day of the fiscal year in which we have total annual gross revenue of at least \$1.235 billion, (iii) the last day of the fiscal year in which we are deemed to be a "large accelerated filer" as defined in Rule 12b-2 under the Exchange Act, which would occur if the market value of our common stock held by non-affiliates exceeded \$700.0 million as of the last business day of the second fiscal quarter of such year, or (iv) the date on which we have issued more than \$1.0 billion in non-convertible debt securities during the prior three-year period.

We are also a smaller reporting company as defined in the Exchange Act. We may continue to be a smaller reporting company even after we are no longer an emerging growth company. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than \$250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than \$100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than \$700.0 million measured on the last business day of our second fiscal quarter.

Quantitative and Qualitative Disclosures About Market Risk

Interest Rate and Market Risk

We are exposed to market risks in the ordinary course of our business, primarily limited to interest rate fluctuations. Our cash and cash equivalents consist of cash in readily available checking accounts and money market funds, and our short-term investments consist of liquid, high quality debt securities. The primary objective of our investment activities is to preserve principal and liquidity while maximizing income without significantly increasing risk. We do not enter into investments for trading or speculative purposes.

Due to the short-term nature of our investment portfolio, we do not believe that a hypothetical 10% increase or decrease in interest rates during any of the periods presented would have a material effect on our financial statements included elsewhere in this prospectus.

Effects of Inflation

Inflation generally affects us by increasing our cost of labor and research and development contract costs. We do not believe inflation has had a material effect on our results of operations during the periods presented in our financial statements included elsewhere in this prospectus.

BUSINESS

Overview

We are a clinical-stage biotechnology company focused on developing natural killer (NK) cell-based therapies for patients suffering from devastating autoimmune diseases and cancers. Our product candidates are derived from donor cells (allogeneic) rather than a patient's own cells (autologous) and are pre-manufactured, and stored frozen and ready to ship to a patient's treatment location, making them what we believe to be "off-the-shelf." Our lead product candidate, AlloNK, is a non-genetically modified, cryopreserved NK cell therapy being evaluated in combination with B-cell targeted monoclonal antibodies (mAbs) in an ongoing Phase 1/1b trial in class III or class IV lupus nephritis (LN) and a basket investigator-initiated trial (IIT) in multiple autoimmune indications. Seminal peer-reviewed clinical studies using autologous CD19 chimeric antigen receptor (CAR) T-cell therapy (auto-CAR-T) for the treatment of autoimmune diseases have demonstrated that deep B-cell depletion in the periphery and in the lymphoid tissue can lead to drug free disease remission. We have already demonstrated that AlloNK in combination with rituximab was able to drive deep B-cell depletion in the periphery and observed complete responses (CRs) in heavily pre-treated patients naïve to auto-CAR-T in our ongoing Phase 1/2 clinical trial in patients with relapsed or refractory B-cell-non-Hodgkin lymphoma (B-NHL). We believe the preliminary results from our Phase 1/2 clinical trial evaluating AlloNK in combination with rituximab in patients with B-NHL provide a readthrough to autoimmune disease because efficacy in both diseases appears to be accomplished with a shared mechanism of action involving B-cell depletion in the periphery and in the lymphoid tissues, followed by an immunological reset and B-cell reconstitution. We expect to report initial data on autoimmune indications from at least one of our Phase 1/1b trial or the basket IIT in the first half of 2025.

To our knowledge, AlloNK was the first allogeneic, off-the-shelf NK cell therapy candidate to receive Investigational New Drug application (IND) clearance to be administered to a patient with an autoimmune disease in a U.S. clinical trial, and to receive United States Food and Drug Administration (FDA) Fast Track designation in an autoimmune disease. Additionally, to our knowledge AlloNK is the first allogeneic NK cell therapy candidate in the United States to receive IND clearance for a basket trial in autoimmune diseases, and specifically the first to be evaluated in rheumatoid arthritis (RA), pemphigus vulgaris (PV), and the anti-neutrophil cytoplasmic antibody (ANCA) associated vasculitis (AAV) subtypes granulomatosis with polyangiitis (GPA) / microscopic polyangiitis (MPA), which we are exploring through a basket IIT. We believe as we continue to execute on our strategic plan that these critical first mover advantages will solidify our leadership in multiple autoimmune diseases with high unmet need. Receiving IND clearance and any special designations, such as Fast Track designation, does not guarantee an accelerated review of AlloNK or increase the likelihood of approval of AlloNK by the FDA. Given our early stage of development, it will take several years before we complete clinical development and receive regulatory approval of AlloNK or any of our product candidates, if at all.

B-Cell Driven Autoimmune Disease Background, Prevalence and Unmet Need

Many autoimmune diseases occur when autoreactive B-cells produce autoantibodies that target the body's own healthy cells and tissues, which can lead to significant morbidity and long-term steroid use. This presents an opportunity to develop treatments that deplete B-cells in a variety of autoimmune diseases such as RA, multiple sclerosis (MS), systemic lupus erythematosus (SLE), LN, AAV, systemic sclerosis (SSc), myasthenia gravis (MG), and myositis, which together account for approximately 6.8 million patients in the United States and Europe alone. Global sales for autoimmune disease, treatments for which in 2023 reached approximately \$160 billion and represent the second-largest class of spending behind oncology, are expected to continue to grow.

Approved treatments for autoimmune diseases encompass various classes of therapies, including steroids, mycophenolate mofetil (MMF), anti-tumor necrosis factor alpha (TNF α) agents and interleukin (IL) inhibitors. Even though these therapies largely provide general immunosuppression and manage symptoms of disease, many patients still suffer from disease progression, leading to worsening complications. Furthermore, chronic use of these therapies typically creates secondary complications for patients, including, but not limited to, increased risk of infections and cancer, cardiovascular disease, hypertension, Cushing's disease, diabetes and osteoporosis.

While auto-CAR-T cell therapies have demonstrated the transformative potential of cell therapy, adoption has been limited since their initial approvals due to several factors, including but not limited to, safety, patient access, and

Table of Contents

scalability. We believe AlloNK in combination with B-cell targeted mAbs represents the next-generation of B-cell depleting therapies because it aims to address important limitations of auto-CAR-T, including:

- o **Scalability:** AlloNK can be manufactured at scale, cryopreserved, easily transported through cold-chain logistics, and we believe be made readily available for patients. In contrast, auto-CAR-T requires a complex, costly, and lengthy manufacturing process that is individualized for each patient. The need for hospitalization further compounds the challenges of scalability and access, adding financial burden to the healthcare system. For example, toxicity and extended hospitalization from treatment with auto-CAR-T could add an incremental financial burden of over \$1 million per patient. The scalability of our process creates the potential to expand treatment access to the many autoimmune patients annually who currently live with the consequences of long-term steroid use.
- o **Safety:** As a result of autologous and allogeneic CAR-T cell therapies' association with immune effector cell-associated neurotoxicity syndrome (ICANS), cytokine release syndrome (CRS) and other severe adverse events, treatment is generally only available at advanced clinical centers capable of supporting these patients. Conversely, in our clinical trial of AlloNK in combination with rituximab in patients with relapsed or refractory B-NHL, as of April 8, 2024, more than two thirds of the patients were not hospitalized within 30 days of dosing AlloNK. We believe this demonstrates, the ability of AlloNK to be administered and managed in an outpatient setting, with limited risk of required hospitalization.
- o **Cost:** Cost of goods sold (COGS) to manufacture auto-CAR-Ts is estimated at over \$100,000 per treatment course, limiting flexibility in therapy pricing. Assuming two billion AlloNK cells per dose and three doses for a treatment regimen of an aggregate of six billion AlloNK cells total per patient with autoimmune disease, AlloNK's COGS per patient would be below \$6,000, an order of magnitude below the current COGS of auto-CAR-T. As auto-CAR-Ts move from their currently marketed indication of hematological malignancies towards chronic and more prevalent autoimmune diseases, AlloNK's extremely competitive commercial COGS could allow for advantageous pricing flexibility and payor coverage, if approved.

Our Pipeline

Our lead product candidate, AlloNK, is currently being evaluated in combination with B-cell targeted mAbs in patients with autoimmune diseases and cancers, such as LN, RA, PV, the ANCA-associated vasculitis subtypes GPA / MPA, SLE and B-NHL. In addition, we are also pursuing AlloNK and our CAR-NK product candidates in multiple indications through collaborator-funded trials. Our current pipeline is depicted below.

Product Candidate	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Partnerships
Artiva-funded Trials	AlloNK (AB-101)	LN	+ Rituximab + Obinutuzumab			
	ADCC-Enhancer	RA PV Vasculitis (GPA/MPA) SLE	Investigator-Initiated Basket Trial ⁽¹⁾			
		NHL	+ Rituximab			
Collaborator-funded Trials		HL	+ Acimtamig ⁽²⁾			AFFIMED
	CAR-NK (AB-201)	Solid tumors	HER2-CAR-NK			GC Cell
	CAR-NK (AB-205)	Hematological malignancies	CD5-CAR-NK			GC Cell

Note: Artiva holds ex-APAC rights to all programs.

[Table of Contents](#)

- (1) The IIT will initially enroll patients with RA, PV, GPA / MPA, and SLE.
- (2) In November 2022, Affimed N.V. (Affimed) announced a collaboration with Artiva to advance development of the combination of acimtamig and AlloNK into a potential registration enabling study, LuminICE-203. In May 2023, Affimed announced the FDA clearance of the IND for the clinical study evaluating the combination of acimtamig and AlloNK in patients with relapsed or refractory Hodgkin lymphoma and CD30+ positive peripheral T-cell lymphoma, initiated enrollment into the study in October 2023 and presented initial data from the first seven patients in June 2024.

AlloNK Overview

AlloNK is an allogeneic, off-the-shelf, cryopreserved NK cell therapy candidate designed to enhance the antibody-dependent cellular cytotoxicity (ADCC) effect of mAbs to drive B-cell depletion and to be administered in the community setting. Using our proprietary cell therapy manufacturing platform, we can generate thousands of doses of cryopreserved, infusion-ready AlloNK from a single cord blood unit.

Our lead product candidate, AlloNK, is being evaluated in combination with B-cell targeted mAbs in an ongoing Phase 1/1b trial in patients with class III or class IV LN, a type of kidney disease that manifests from SLE, and a basket IIT in multiple autoimmune indications. LN is reported to affect approximately half of all patients with SLE. There are an estimated 210,000 SLE patients with LN across the United States and Europe, and approximately 30% do not respond to currently available treatments and can develop end stage renal disease and require dialysis. We are focusing on LN as the first target of our clinical development program in light of the clearly identifiable patient group, significant unmet need and presence of measurable clinical endpoints to facilitate regulatory approval submissions. We have begun dosing and are continuing to enroll our Phase 1/1b open-label multi-center clinical trial in combination with rituximab or obinutuzumab in patients with class III or class IV LN who previously failed treatment. In addition, AlloNK in combination with rituximab or obinutuzumab has been granted Fast Track designation by the FDA to improve disease activity in patients with class III or class IV LN. We also received Fast Track designation for AlloNK for intravenous (IV) infusion in combination with rituximab for the treatment of relapsed or refractory B-NHL to improve cancer response rates. Fast Track designation does not guarantee an accelerated review of AlloNK or increase the likelihood that AlloNK will receive regulatory approval by the FDA. We intend to pursue additional autoimmune diseases with AlloNK in combination with B-cell targeted mAbs.

In April 2024, the FDA cleared an IND submitted by Integral Rheumatology & Immunology Specialists (IRIS), a large community practice rheumatology clinic in Florida, to conduct a basket IIT to assess the safety, tolerability and clinical activity of AlloNK in combination with rituximab in patients with RA, PV, the ANCA-associated vasculitis subtypes GPA / MPA and SLE. We expect to report initial data on autoimmune indications from at least one of our Phase 1/1b trial or the basket IIT in the first half of 2025. We will supply AlloNK and funding for the IIT, but unlike our sponsored clinical trials, IRIS will be the regulatory sponsor of, and responsible for, the conduct of the IIT.

Because AlloNK can be used with mAbs that target different antigens based on the target cell's antigen expression, we believe we have the versatility to use AlloNK in combination with different mAbs to deplete distinct B-cell subpopulations. AlloNK has the potential to be used with a CD19 or CD20 targeting mAb to determine which drives a more robust response. Furthermore, emerging evidence with auto-CAR-T targeting B-cell maturation antigen (BCMA), a plasma cell antigen, either alone or dual-targeted with CD19, has shown distinct therapeutic activity in several indications when compared with CD19-only auto-CAR-T. We believe AlloNK in combination with approved anti-CD38 mAbs could target a similar plasma cell population. We believe this versatility will enable us to pursue a wider range of indications than cell therapies engineered against specific targets.

Our Collaborator-Funded Trials

We have a collaboration with Affimed GmbH, a subsidiary of Affimed N.V. (Affimed), whereby we are investigating AlloNK in a Phase 2 trial in combination with acimtamig, a CD30-targeted NK cell engager, in CD30+ Hodgkin lymphoma (HL). In addition, we own exclusive worldwide rights (excluding Asia, Australia and New Zealand (ex-APAC)) for AB-201, a human epidermal growth factor receptor 2 (HER2) targeting CAR-NK cell product candidate, and for AB-205, a CD5 directed CAR-NK cell product candidate.

Manufacturing Capabilities

We have a manufacturing-first approach, referencing the fact that even before we were founded, our strategic partner, GC Cell Corporation (GC Cell), had already invested years pioneering the manufacturing process that we use

today. Unlike most other companies in the NK field who started clinical development before establishing a scalable manufacturing process, we started clinical development with a mature and robust process in place. Our process is designed to allow us to produce off-the-shelf, allogeneic NK cell therapy candidates and to potentially meet the scale of commercial demand, with the mission to make these therapies broadly accessible for patients with devastating autoimmune diseases and cancers. We leveraged our deep expertise in NK cell biology to establish an end-to-end proprietary process in collaboration with GC Cell. In our San Diego headquarters, we have established a 9,000 square foot, purpose-built cell production center that is compliant with current Good Manufacturing Practices (cGMP) and capable of producing enough vials to treat over 1,000 autoimmunity patients annually. Furthermore, assuming two billion AlloNK cells per dose and three doses for a treatment regimen of an aggregate of six billion AlloNK cells total per patient with autoimmune disease, AlloNK COGS per patient would be below \$6,000, an order of magnitude below the current COGS of auto-CAR-T.

Our Management Team, History and Investors

We were founded in 2019 as a spin out of GC Cell, formerly GC Lab Cell Corporation, a leading healthcare company in the Republic of Korea (Korea), pursuant to a strategic partnership granting us exclusive, worldwide, ex-APAC, rights to GC Cell's NK cell manufacturing technology and programs. GC Cell has an established track record in cell therapy, with over two decades of cell therapy research, process development and manufacturing experience, as well as a clinical and commercial track-record outside the United States with the first ever marketed T-cell product, Immuncell-LC, which received South Korean Ministry of Food and Drug Safety (MFDS) approval for hepatocellular carcinoma in 2017. An investigational version of the product candidate also received FDA Orphan Drug Designation for pancreatic cancer, liver cancer and glioblastoma in 2018. In addition, GC Cell spent over a decade optimizing the manufacturing process for NK cell therapeutics, including selection of cord blood as a starting material, expanding process scale and enabling cryopreservation. GC Cell utilizes a custom-built 300,000 square foot cell therapy research, process development and cGMP manufacturing facility from which we were able to produce drug product for our first clinical trials in the United States.

Our team is led by executives who have deep experience in their respective functions in cell therapy with multi-faceted experience across a company's life cycle. Our leadership team has extensive combined experience in therapeutics, medical devices and diagnostics companies.

- **Fred Aslan, M.D., President and Chief Executive Officer.** Dr. Aslan has direct experience both as a healthcare investor as well as an entrepreneur building and leading companies. Dr. Aslan most recently served as President and Chief Business Officer of Vividion Therapeutics, Inc. (Vividion), a private company focused on developing a range of small molecule therapies for oncology and immunology indications. Prior to Vividion, Dr. Aslan was an investor with Venrock where he led investments and cofounded and served as a board member of Receptos, Inc., a biotech company focused on autoimmune diseases, which was acquired by Celgene Corporation. He was also the Chief Executive Officer of Adavium Medical, Inc., which he grew to an established company with fully integrated research and development, manufacturing and commercial capabilities.
- **Neha Krishnamohan, Chief Financial Officer and Executive Vice President, Corporate Development.** Ms. Krishnamohan was previously Chief Financial Officer and Executive Vice President, Corporate Development at Kinnate Biopharma Inc. (Kinnate), a publicly held clinical stage oncology company. Prior to Kinnate, Ms. Krishnamohan executed over \$100 billion in mergers and acquisitions and capital markets transactions as a healthcare investment banker with Goldman Sachs.
- **Christopher Horan, Chief Technical Operations Officer.** Mr. Horan most recently served as Chief Technical Officer at SanBio Company Limited, and previously spent nearly 14 years at Genentech, Inc., a member of the Roche Group, as Senior Vice President, Global Product and Supply Chain Management leading a large global team supplying Roche biopharmaceutical products worldwide.
- **Thorsten Graef, M.D., Ph.D., Chief Medical Officer.** Dr. Graef has extensive experience in leading programs from early development to approval and has served in numerous development roles including Vice President Early Oncology at AbbVie Inc. and prior to that Head of Development at Pharmacyclics LLC (acquired by AbbVie Inc.).

[Table of Contents](#)

- **Jennifer Bush, Chief Operating Officer.** Ms. Bush also serves as our Chief Legal and People Officer, and previously served as General Counsel, Head of Human Resources and Regulatory Affairs at Organovo, Inc., a publicly held biotechnology company.
- **Heather Raymon, Ph.D., SVP, Research & Early Development.** Dr. Raymon has a breadth of experience in biotech and biopharma across various therapeutic areas including inflammation, immunology and oncology. Previously Dr. Raymon was Executive Director, Early Development Program Lead at Bristol-Myers Squibb Company (BMS) where she led multiple clinical stage programs.

We have assembled scientific advisors with deep experience in both cell therapy and autoimmune disease who are actively involved in our drug development process and programs. Our advisors include:

- **Kenneth Kalunian, M.D.,** Professor of Medicine at University of California, San Diego (UC San Diego) and Director of the Lupus Research and Clinical Center of Excellence
- **Jill Buyon, M.D.,** Professor of Rheumatology and Director of the Division of Rheumatology at New York University (NYU) School of Medicine, and Director of the NYU Lupus Center
- **Maureen McMahon, M.D.,** Professor of Medicine / Rheumatology at University of California, Los Angeles (UCLA) and Site Director of the UCLA Lupus Clinical Trials Network
- **Brad Rovin, M.D.,** Professor of Medicine and Pathology and Director of the Division of Nephrology at The Ohio State University (OSU), Wexner Medical Center
- **Evren Alici, M.D., Ph.D.,** Head of Cell and Gene Therapy, Karolinska Institute
- **Richard Maziarz, M.D.,** Medical Director, Blood and Marrow Transplant and Cellular Therapy, Oregon Health & Science University

We have been supported by leading life science investors, including 5AM Venture Management, LLC, RA Capital Management and venBio Partners. Prospective investors should not rely on the investment decisions of our existing investors, as these investors may have different risk tolerances and received their shares in prior offerings at prices lower than the price offered to the public in this offering. In addition, some of these investors may not be subject to reporting requirements under Section 16 of the Securities Exchange Act of 1934, as amended (the Exchange Act), and, thus, prospective investors may not necessarily know the total amount of investment by each of the prior investors and if and when some of the prior investors decide to sell any of their shares.

Our Mission

Our mission is to develop effective, safe and accessible cell therapies for patients with devastating autoimmune diseases and cancers.

Our Strengths

We believe that our company and therapeutic candidates possess the following competitive strengths.

- **Autoimmune disease treatment approach supported through scientific publications and our ongoing clinical trial.** Our conviction in the transferability of our proposed mechanism of action from treatment of B-NHL to treatment of autoimmune diseases is driven by both the peer reviewed scientific publication of clinical trial results of auto-CAR-T in autoimmune diseases as well as preliminary data from our ongoing Phase 1/2 clinical trial of AlloNK in combination with rituximab in patients with relapsed or refractory B-NHL. In all 29 patients in our trial with samples analyzed, as of March 26, 2024, following the first cycle of treatment, all patients achieved non-quantifiable peripheral B-cell levels by Day 8 (except for one patient who achieved such B-cell depletion by Day 15) following the start of therapy, regardless of B-cell levels at baseline. We believe this data provides support for a B-cell depleting mechanism of action of AlloNK in combination with B-cell targeted mAbs. AlloNK in combination with rituximab has also demonstrated CRs in B-NHL patients as measured by imaging of tumor lesions. Because of the common tissues of interest, principally the lymphoid tissues, in B-NHL and autoimmune diseases, we believe data in these B-NHL patients provides supporting evidence for our proposed mechanism of action in autoimmune disease. In the Phase 1 portion of this trial, as of April 30, 2024, in the fourteen patients who were naïve to CAR-T, the overall response rate (ORR), which is the proportion of patients who have a partial response (PR) or CR, was 71%, including

eight CRs (57%), and two PRs (14%), as determined by the Lugano 2014 criteria. The Lugano 2014 criteria is a widely accepted and published methodology used in clinical trials as well as in clinical practice for response assessment in lymphoma. The criteria recommend a combination of disease morphology assessment using computed tomography (CT) and lesion metabolic activity assessment on positron emission tomography (PET), with PET metabolic assessments being the driver for overall response assessment. For further description of the 2014 Lugano criteria, please see pages 132-133. Thirteen of these patients had aggressive forms of B-NHL, and the CR rate in this subset, as determined by the Lugano 2014 criteria, was 62%. As of the April 30, 2024, data cutoff date, six of the eight patients with a CR had an ongoing response (meaning continuation of the CR at all follow-up points), with five of these patients remaining progression free at six months or later. The longest responder remained progression free for at least 18 months after the start of treatment. We believe these data support that AlloNK in combination with B-cell targeted mAbs has the potential to provide deep B-cell depletion in common target tissues between B-NHL and autoimmune diseases and offer therapeutic potential, a differentiated safety profile and patient accessibility in numerous autoimmune diseases.

- **Versatile mAb combination approach allows flexibility to tailor targeting approach to specific B-cell subpopulations.** We believe combining AlloNK with approved B-cell targeted mAbs may offer therapeutic benefits in a broad range of B-cell-driven diseases. AlloNK, as a non-genetically modified, non-targeted NK cell, is designed to utilize a mAb for targeting. Therefore, we believe different mAbs could be used to target distinct B-cell populations based on the target cell's antigen expression. Beyond rituximab and other anti-CD20 mAbs, we have already conducted numerous preclinical studies in which we have shown cytotoxic activity of AlloNK in combination with other approved B-cell targeted mAbs, such as anti-CD19 and anti-CD38 mAbs. Emerging evidence with auto-CAR-T targeting the plasma cell antigen BCMA, either alone or dual-targeted against CD19, has shown distinct therapeutic activity in several indications when compared with CD19-only auto-CAR-T, and we believe AlloNK in combination with approved anti-CD38 mAbs could target a similar plasma cell population. We have the opportunity to develop AlloNK in combination with approved B-cell targeted mAbs using a variety of targets, including the potential for dual targeting by treating in combination with two mAbs. We believe this versatility will enable us to pursue a wider range of indications than cell therapies engineered against specific targets.
- **Proprietary manufacturing process allows for scalable and potentially cost effective AlloNK production.** Our robust chemistry, manufacturing and controls (CMC) experience, ample capacity and limited overhead enable us to produce allogeneic, off-the-shelf, NK cell therapy candidates at scale. Utilizing our proprietary process we and GC Cell have manufactured over 35 clinical batches of AlloNK, producing thousands of AlloNK vials at one billion cells per vial, and have demonstrated both batch-to-batch and donor-to-donor consistency. Our manufacturing platform and scale-up process is rooted in over a decade of NK cell expansion experience by our strategic partner, GC Cell, and has been further improved upon by our team. In our San Diego headquarters, we have established a 9,000 square foot, purpose-built cell production center that is cGMP-compliant, and capable of producing enough vials to treat over 1,000 autoimmunity patients annually. We are developing a 200-liter, commercial-scale process that we believe has the potential to efficiently supply many thousands of patients with a COGS below \$1,000 per one billion-cell vial. Assuming two billion AlloNK cells per dose and three doses for a treatment regimen of an aggregate of six billion AlloNK cells total per patient with autoimmune disease, AlloNK COGS per patient would be below \$6,000, an order of magnitude below the current COGS of auto-CAR-T. With this COGS, we could have the flexibility to reduce the price relative to auto-CAR-T while still maintaining a high margin.
- **Non-genetically modified cell therapy has not shown integrating vector-induced secondary malignancies, which is a benefit in an autoimmunity setting.** As of December 31, 2023, the FDA had received reports of 22 cases of secondary T-cell malignancies (including CAR+ lymphoma) in patients who received treatment with BCMA- or CD19-directed genetically modified auto-CAR-T therapy. Transgene insertion of CAR was detected in the malignant clone in each of the three cases for which genetic sequencing was performed. As a result, in January 2024, the FDA determined that boxed warning language addressing these malignancies should be included on the label for all BCMA- and CD19-directed genetically modified auto-CAR-Ts to alert patients and clinicians of the potential risk of developing secondary T-cell malignancies following treatment. Unlike CAR-T and any genetically modified cell therapy, AlloNK is a non-genetically modified NK cell therapy candidate and has not shown any secondary malignancies in our clinical trials as of April 8, 2024. We believe this will make our therapeutic candidate a preferable and differentiated treatment option for physicians and patients.

- **AlloNK cell approach aims to broaden community access, drive improved patient experience, improve clinical recruitment timelines and expand commercial opportunity.** In our clinical trials to date, AlloNK in combination with a B-cell targeted mAb was mostly administered and managed outside of a hospital setting. This is in contrast to auto-CAR-T cell therapies, which have been limited by the need for hospitalization due to the risks of ICANS and CRS, among other severe adverse events. Our product candidate is designed to enable rheumatologists to administer AlloNK in combination with a B-cell targeted mAb within their own outpatient infusion centers, potentially allowing patients to avoid the typically required hospitalization associated with CAR-T cell therapies. We believe the potential to administer an off-the-shelf therapy in an outpatient setting could meaningfully reduce the patient's treatment burden, translating to a potential competitive advantage in enrolling patients in our clinical trials and capturing market share, if approved.
- **Strategic execution led to first-mover advantage in autoimmune disease.** We have advanced AlloNK into clinical trials for autoimmune diseases, and we believe we have achieved multiple critical clinical and regulatory milestones ahead of other allogeneic, off-the-shelf NK cell therapy companies. Specifically, the FDA cleared our IND for AlloNK in combination with rituximab for our Phase 1/1b clinical trial in patients with class III or IV LN in August 2023, and we dosed the first patient in this trial in April 2024. To our knowledge, this made AlloNK the first allogeneic, off-the-shelf NK cell therapy candidate to be administered to a patient with an autoimmune disease in a U.S. clinical trial and the first allogeneic, off-the-shelf NK cell therapy to receive Fast Track designation in an autoimmune indication. Further, in April 2024, the FDA cleared an IND submitted by IRIS, a large community practice rheumatology clinic in Florida, to conduct a basket IIT in multiple autoimmune indications. Through this IIT, to our knowledge, AlloNK is the first allogeneic NK cell therapy candidate in the United States to receive allowance to proceed with a basket study under an IND, and specifically the first to be evaluated in RA, PV and AAV, which we believe solidifies our potential leadership in multiple large-market diseases. We believe our established manufacturing capabilities empower us to capitalize on our first-mover advantage to efficiently develop and, if approved, potentially commercialize a wide range of indications relative to auto-CAR-Ts, which we believe are constrained due to the limitations associated with manufacturing autologous cell therapies. We believe all of these potential advantages, along with our expected competitive advantage in enrollment timing, will allow us to efficiently progress AlloNK through the clinic and position us to capitalize on the broad market opportunity of B-cell driven autoimmune diseases. Receiving IND clearance and any special designations, such as Fast Track designation, does not guarantee an accelerated review of AlloNK or increase the likelihood of approval of AlloNK by the FDA. Given our early stage of development, it will take several years before we complete clinical development and receive regulatory approval of AlloNK or any of our product candidates, if at all.
- **Leading scientific advisors who guide our development strategy in autoimmune disease.** With our focus of developing AlloNK in autoimmune diseases, we have rapidly assembled key opinion leaders from leading academic and medical institutions including UC San Diego, UCLA, NYU and OSU to serve as advisors and guide our development.

Our Strategy

Our strategy is to develop safe and effective NK cell-based therapies that patients and physicians can utilize in a community setting. We believe the compelling cell killing properties of NK cells, when combined with mAbs for targeting specific antigens, creates an opportunity to generate potentially transformative therapies. Key elements of our strategy include:

- **Advance our lead product candidate, AlloNK, through clinical development and demonstrate the clinical potential of NK cell therapies in autoimmune diseases.** We are advancing AlloNK through clinical development to address the significant unmet need in autoimmunity as well as patient and physician desire for a safe, accessible therapy. We believe data from our Phase 1/2 clinical trial of AlloNK in combination with rituximab in patients with relapsed or refractory B-NHL support the potential for AlloNK in combination with B-cell targeted mAbs to provide deep B-cell depletion in common target tissues between B-NHL and autoimmune diseases. The FDA cleared our IND for AlloNK in combination with rituximab for our Phase 1/1b clinical trial in patients with class III or class IV LN in August 2023, and we dosed the first patient in this trial in April 2024.

- **Demonstrate the clinical potential of NK cell therapies to address limitations of auto-CAR-Ts.** Auto-CAR-Ts have proven to be an effective therapeutic modality in cancer and have shown therapeutic clinical benefit in autoimmune disease. We believe this is the first step in an evolution where next generations of the technology will improve safety and expand access to the point where cell therapies truly are available to any patient in need. We have optimized an end-to-end NK cell manufacturing process to potentially deliver AlloNK on a large scale and at low cost, having leveraged more than a decade of NK cell manufacturing expertise and know-how. We believe AlloNK in combination with B-cell targeted mAbs represents the next-generation of B-cell depleting therapies because it aims to address important limitations of auto-CAR-T, including:
 - **Scalability:** AlloNK is an allogeneic, off-the-shelf product candidate that can be manufactured at scale, cryopreserved, easily transported through cold-chain logistics and we believe can be made readily available for patients. In contrast, auto-CAR-T therapy requires a complex, costly, and lengthy manufacturing process that is individualized for each patient. The need for hospitalization further compounds the challenges of scalability and access, adding financial burden to the healthcare system. For example, toxicity and extended hospitalization from treatment with auto-CAR-T could add an incremental financial burden. According to a real-world study conducted in 2021 by Oregon Health & Science University and presented by Maziarz *et. al*, the average cost of treatment, excluding the cost of auto-CAR-T itself, was \$383,000 and could reach over \$1 million per patient. The scalability of our process creates the potential to expand treatment access to the many autoimmune patients annually who currently live with the consequences of long-term steroid use.
 - **Safety:** As a result of autologous and allogeneic CAR-Ts' association with CRS, ICANS, and other severe adverse events, treatment is generally only available at advanced clinical centers capable of supporting these patients. Conversely, in our clinical trial of AlloNK in combination with rituximab in patients with relapsed or refractory B-NHL, as of April 8, 2024, more than two-thirds of the patients were not hospitalized at all within 30 days of dosing AlloNK. We believe this demonstrates the ability of AlloNK to be administered and managed in an outpatient setting, with limited risk of required hospitalization.
 - **Cost:** Cost of goods to manufacture auto-CAR-Ts is estimated at over \$100,000 per treatment course, limiting flexibility in therapy pricing. Assuming two billion AlloNK cells per dose and three doses for a treatment regimen of an aggregate of six billion AlloNK cells total per patient with autoimmune disease, AlloNK COGS per patient would be below \$6,000, an order of magnitude below the current COGS of auto-CAR-T. As auto-CAR-Ts move from their currently marketed indication of hematological malignancies towards chronic and more prevalent autoimmune diseases, AlloNK's extremely competitive commercial COGS could allow for advantageous pricing flexibility and payor coverage, if approved.
- **Expand AlloNK development across several autoimmune indications utilizing different mAbs.** We are further exploring the potential of AlloNK in other indications and other antibody combinations through IITs and company-sponsored clinical trials. In April 2024, the FDA cleared an IND submitted by IRIS, a large community practice rheumatology clinic in Florida, to conduct a basket IIT under an IND testing the combination of AlloNK with rituximab in a study of four autoimmune diseases: RA; PV; GPA / MPA; and SLE. We expect to report initial data on autoimmune indications from at least one of our Phase 1/1b trial or the basket IIT in the first half of 2025.
- **Continue to evaluate and pursue tailored strategies to advance our platform capabilities and maximize patient access to AlloNK.** We have a disciplined strategy to evaluate partnerships that are designed to further our NK cell development and manufacturing efforts with the goal of delivering our product candidates to as many patients as stand to benefit. Our two main manufacturing and oncology program development partnerships with GC Cell and Affimed, respectively, are products of this strategy. We also plan to commercialize our product candidates and will look to make further investments at the appropriate time to maximize access and the commercial potential of our product candidates.

Introduction to Autoimmune Disease

Background

Many autoimmune diseases occur when autoreactive B-cells produce autoantibodies that target the body's own healthy cells and tissues instead of foreign pathogens. In a healthy individual, these malfunctioning immune cells, such as B-cells and T-cells, are either eliminated before they fully develop or are kept in check by various regulatory mechanisms. However, in individuals with autoimmune diseases, these safety measures are compromised due to a mix of genetic factors and exposure to certain antigens from infections or environmental sources.

The prevalence of autoimmune diseases is both widespread and growing, with over 80 known autoimmune diseases. The persistent and severe nature of these diseases results in substantial medical expenses and a decline in quality of

Table of Contents

life, posing significant challenge for patients, their families and the healthcare system. Global sales for autoimmune disease, treatments for which in 2023 reached approximately \$160 billion and represent the second-largest class of spending behind oncology, are expected to continue to grow. There is a significant unmet medical need in autoimmune diseases despite the number of approved therapies, given these treatments are often not curative and many patients do not achieve optimal outcomes.

B-Cell Driven Autoimmune Diseases

Autoimmune diseases encompass a broad range of diseases and symptoms, with the presence of autoantibodies—produced by autoreactive B-cells that mistakenly target the body's healthy cells and tissues—being a common characteristic of many autoimmune diseases. While the specific autoantigen targeted and the primary affected tissue or organ may vary, the role of B-cells in producing these autoantibodies is generally consistent. Increasing evidence suggests that autoreactive B-cells also contribute to the pathology of many autoimmune diseases through their interaction with T-cells and cytokine production. This shared biological mechanism presents an opportunity to develop treatments targeting the production of autoantibodies by B-cells for a variety of autoimmune diseases.

The following table sets forth the estimated prevalence for select B-cell-driven autoimmune diseases in the United States and in Europe.

	United States	Europe	Combined
Rheumatoid Arthritis	1.3M	2.3M	3.6M
Multiple Sclerosis	750K	1.2M^δ	2.0M
ANCA Vasculitis	100K	205K	305K
Systemic Sclerosis (<i>Scleroderma</i>)	85K	130K	215K
Systemic Lupus Erythematosus (<i>Non-Lupus Nephritis</i>)	100K	115K^δ	215K
Lupus Nephritis	100K	110K	210K
Myasthenia Gravis	60K	90K	150K
Myositis	45K	100K	145K
Total			~6.8M

All figures for Europe are for geographic Europe, except ^δ: which is for the European Union.

Limitations of Current Therapies

Approved treatments for autoimmune diseases encompass various classes of therapies, including steroids, MMF, TNF α agents and IL inhibitors. These therapies largely provide general immunosuppression and manage symptoms of disease. For instance, steroids and MMF have broad anti-inflammatory and immune-suppressing effects, anti-TNF α therapies inhibit TNF α , a cytokine involved in systemic inflammation, and IL inhibitors target certain ILs that activate the immune system and cause inflammation, such as IL-1 and IL-6. Even though these therapies largely provide general immunosuppression and manage symptoms of disease, many patients suffer from disease progression, leading to worsening complications. Furthermore, chronic use of these therapies typically creates secondary complications for patients, including, but not limited to, increased risk of infections and cancer, cardiovascular disease, hypertension, Cushing's disease, diabetes and osteoporosis. Monoclonal antibodies that target B-cell antigens have also received approval for treating various diseases involving pathological B-cells, including autoimmune diseases and blood cancers. Rituximab, a mAb targeting the B-cell antigen CD20, has demonstrated effectiveness in treating several autoimmune diseases, including RA, PV and AAV. However, rituximab alone does not typically induce complete B-cell depletion in all patients, which may account for incomplete and inconsistent clinical responses. For instance, a pivotal Phase 3 trial of rituximab for the treatment of LN failed to show statistical improvement in clinical outcomes with rituximab when added

to the standard of care, MMF and steroids, as compared to MMF and steroids alone. However, in a post-hoc analysis of the same trial data, it was observed that achievement of complete peripheral B-cell depletion, as well as the rapidity and duration of complete peripheral depletion, were associated with complete renal responses. We believe these data support the notion that if a therapy induces deeper and more consistent B-cell depletion, it will achieve higher response rates.

Promise of Cell Therapy in Autoimmune Disease

The advancement of auto-CAR-T cell therapies in oncology has opened the door to applying B-cell targeting cellular therapies in B-cell driven autoimmune diseases. Auto-CAR-T cell therapy involves genetically modifying a patient's own T-cells to produce and express a CAR, enabling the engineered T-cell to recognize and attack cancer cells more effectively. This personalized approach involves collecting the patient's T-cells, genetically engineering them in a laboratory to target a specific cancer cell antigen, then re-infusing these enhanced cells back into the patient to seek out and destroy cancer cells. Since the first auto-CAR-T cell therapy, Kymriah, was approved by the FDA in 2017 for the treatment of B-cell acute lymphoblastic leukemia (B-ALL), additional auto-CAR-Ts have been approved and uses have expanded to treatment of other forms of cancer, including certain types of NHL and multiple myeloma.

Auto-CAR-T products targeting CD19 have been transformative in the treatment of B-cell driven hematological malignancies such as B-ALL and NHL. The first FDA-approved auto-CAR-T cell therapies were designed to target CD19, a B-cell specific antigen prevalent in B-cell malignancies. The use of auto-CAR-T cell therapy aims to deplete these malignant cells as well as other CD19-expressing cells, including healthy B-cells. The ultimate aim of CD19 auto-CAR-T is to deplete cancerous B-cells in the periphery and lymphatic tissue where cancerous lesions grow, and CRs, measured by PET imaging coupled with computed tomography (CT) imaging (PET/CT) provide evidence that auto-CAR-T can target and deeply deplete these cancerous B-cells. Given the significance of B-cells in multiple autoimmune diseases, we believe the depletion of these cells will have a therapeutic benefit in a wide range of B-cell driven autoimmune diseases.

Cell Therapy in Autoimmune Disease with Auto-CAR-T Cell Therapy

The success of auto-CAR-T cell therapies in treating B-cell hematologic malignancies has spurred interest in applying these mechanisms for the treatment of various autoimmune diseases. Given the role of autoantibodies produced by autoreactive B-cells, as well as evidence suggesting that autoreactive B-cells contribute to the pathology of many autoimmune diseases through their interaction with T-cells and cytokine production, the hypothesis is that deeply depleting B-cells with targeted cell therapy will lead to clinical responses in autoimmune diseases.

Third-party clinical studies have shown that treating autoimmune disease with B-cell targeted cell therapy in patients who were refractory to other therapies resulted in rapid responses and remissions as determined by the Definition of Remission in SLE criteria, with patients not receiving further immunosuppressive drugs or steroids (drug-free remission). In 2022, a study led by Dr. Georg Schett reported results from five SLE patients treated with a CD19 auto-CAR-T, published in 2022 by Mackensen *et al.* in *Nature Medicine*. We believe several important observations from this provided insight into the potential value of B-cell targeted cell therapy.

- **Immune system reset.** Auto-CAR-T cells were observed to expand in vivo following treatment, and B-cells were rapidly and deeply depleted upon initiation of treatment. However, auto-CAR-T cells were short-lived in circulation, and all five patients experienced B-cell reconstitution after an average time of 110 days with no relapse of SLE.
- **Resolution of proteinuria.** Rapid reduction in proteinuria in the four patients with underlying LN, from urine protein creatinine ratio (UPCR) levels of 2-8 g/g Cr to <0.5g/g by three months.
- **Elimination of autoantibodies.** Autoantibodies against common antigens in SLE, such as dsDNA, disappeared from the five patients, as well as autoantibodies against other antigens.
- **Preservation of vaccination responses.** No substantial decline in immune responses against common vaccines, including measles, rubella, mumps, varicella zoster, hepatitis B, tetanus, diphtheria and pneumococci, were detected compared to baseline.

In a follow-up study published in *The New England Journal of Medicine* by Muller *et al.* in 2024, reporting data from the five patients above and three additional SLE patients, long-term follow-up of up to 29 months showed that disease activity remained absent in all eight SLE patients. The therapy was also observed to be effective in idiopathic inflammatory myositis, where all three patients treated had an American College of Rheumatology–European League against Rheumatism major clinical response and normalization of creatine kinase levels after three months and maintained these responses for up to 12 months; and in systemic sclerosis, where all four patients

[Table of Contents](#)

treated showed reduced severity of skin and lung disease for up to three months (and for up to six months in three patients that continued follow-up).

Limitations of Autologous CAR-T Cell Therapy

While auto-CAR-T cell therapies have demonstrated the transformative potential of cell therapy, adoption has been limited since initial approvals due to several factors, including, but not limited to, safety, patient access and scalability, as summarized below.

Safety

- **Adverse Events:** Auto-CAR-T cell therapies have been associated with CRS and ICANS that could develop over a period of weeks. CRS in particular requires close observation, and any Grade 2 or higher case requires hospitalization and administration of tocilizumab. Auto-CAR-T products approved for use in NHL have shown that between 46% to over 90% of patients experience any grade CRS, with 4% to 13% experiencing serious Grade 3 or higher events. In practice, tocilizumab is being utilized with Grade 1 CRS as well, possibly limiting the number of patients who escalate to Grade 2 and higher. For example, in a study by Schett of CD19 auto-CAR-T in autoimmune disease, 11 of 15 patients experienced CRS of any grade. Ten patients had Grade 1 CRS only, but tocilizumab was used in five of these patients. This early intervention and unpredictable time to onset requires that the patient remain within close proximity of a treatment facility that can manage CRS for a period of several weeks following the initial CAR-T infusion.
- **Secondary T-cell Malignancies:** Cells that have been genetically modified could have the potential to become cancerous, resulting in secondary T-cell malignancies. As with all gene therapy products with integrating vectors (lentiviral or retroviral vectors), the potential risk of developing secondary malignancies is labeled as a class warning in the United States prescribing information for approved BCMA-directed and CD19-directed genetically modified auto-CAR-T cell therapies. In January 2024, the FDA recommended updated safety language be added across product labels for all CD19 and BCMA auto-CAR-T cell therapies to highlight the risk of secondary T-cell malignancy, including language in the box warning.

Patient Access

- **Limited Availability:** Treatment with auto-CAR-T cell therapies is generally only available at advanced clinical centers that can adequately support the complex logistics involved in the providing auto-CAR-T cell therapies and the patients that require extensive safety monitoring and potential need for hospitalization.
- **High Cost Burden:** COGS to manufacture auto-CAR-T cell therapies is estimated at over \$100,000 per treatment course. This may limit pricing flexibility and could constrain the number of patients able to afford treatment.

Manufacturing

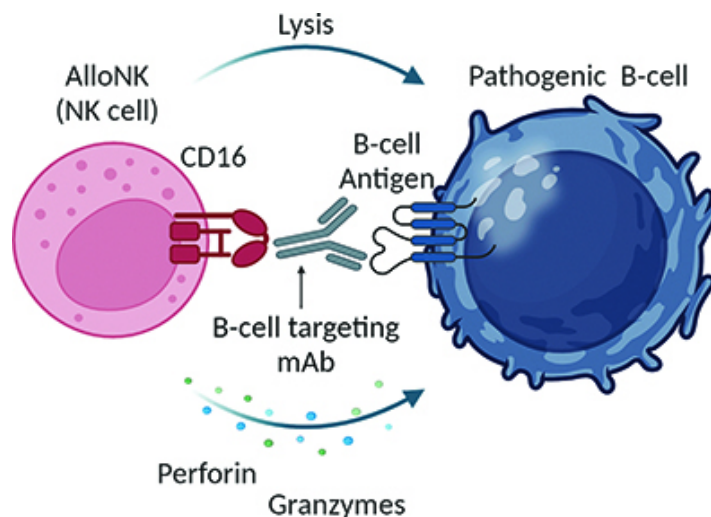
- **Complex Manufacturing:** Because auto-CAR-T cell therapies are derived from a patient's own cells, they are subject to numerous potential inefficiencies inherent to a patient-specific manufacturing process. Manufacturing auto-CAR-T cell therapies is an intricate process that begins with leukapheresis to obtain T-cells from the patient's peripheral blood. These isolated T-cells are then shipped to a manufacturing site where CAR vectors are transduced and cells are expanded before being packaged as a drug product and returned to the clinical site for treatment. As many as 10% to 20% of patients may ultimately not receive product for treatment because of issues with either leukapheresis or the manufacturing process.
- **Lengthy Lead Time:** Because of such complexities, manufacturing processes for currently approved CAR-T cell therapies can take approximately three to five weeks following apheresis to be treated with their personalized auto-CAR-T cells.

Our Solution – AlloNK

AlloNK is an allogeneic, off-the-shelf, cryopreserved NK cell therapy candidate designed to enhance the ADCC effect of mAbs to drive B-cell depletion. In preliminary results from 29 B-NHL patients, as of March 26, 2024, AlloNK in combination with a B-cell targeted mAb has demonstrated deep depletion of peripheral B-cells and CRs in certain patients in clinical trials. Because in both B-NHL and autoimmune disease the potential therapeutic activity may be driven by B-cell depletion in the periphery and lymphoid tissues, we believe these preliminary data in B-NHL patients provide supporting evidence for our proposed mechanism of action in autoimmune disease. Using our cell therapy manufacturing platform, we have manufactured thousands of doses of cryopreserved, infusion-ready AlloNK cells from a single cord blood unit. We believe the design of AlloNK creates the potential for administration in the community setting and the scalability for broad commercialization, if approved.

NK Cell Background

NK cells are part of the innate immune system, which is the body's first line of immune surveillance and defense. NK cells modulate their activity through a balance of activating and inhibiting receptors on their surface that engage with their environment including with target cells. This balance enables NK cells to recognize and kill abnormal cells while suppressing cytotoxic responses to normal tissue, thereby providing a population of immune effector cells that defend against cancer and virus-infected cells. NK cells naturally work in concert with antibodies. The antibody first binds to a target on a diseased cell, then to the NK cell via the cell-surface receptor CD16, also known as FcγRIII, which engages the antibody to mount an ADCC response. NK cells may have an advantage over other immune cells, such as the T-cells used in CAR-T cell therapy and other cell therapies, because they can be used as allogeneic therapies, meaning that NK cells from one donor can be administered to one or many patients without the requirement for gene editing or other genetic manipulations.



Schematic of NK Cell Receptor Interaction with Target Cells. NK Cell Activation via ADCC Leads to NK-mediated Cytotoxic Activity

To produce AlloNK, we select cord blood units that have a variant of CD16 known as 158 V/V, which has been shown in preclinical studies to lead to increased ADCC activity. The CD16 158V/V point mutation variant encodes for a FcγRIII receptor that has been shown in preclinical studies to have higher affinity for immunoglobulin G mAbs. In a third-party clinical trial of rituximab, a significantly higher response rate was seen in follicular lymphoma patients with the CD16 genotype encoding the 158 V/V compared to those with other CD16 genotypes. As such, we believe NK cells sourced from donors with the CD16 158 V/V allele will have naturally higher affinity for therapeutic mAbs without the need for genetic engineering of the cell therapy product candidate.

AlloNK, as a non-genetically modified, non-targeted NK cell, is designed to utilize a mAb for targeting. Therefore, we believe different mAbs could be used to target distinct B-cell populations based on the target cell's antigen expression. For instance, CD19 and CD20 are expressed on memory B-cells, whereas CD38 and BCMA are expressed on plasma cells. Therefore, we believe AlloNK could be combined with different mAbs to kill distinct B-cell populations.

B-NHL Readthrough to Autoimmune Disease

We believe the success of cell therapies such as auto-CAR-T in oncology has paved the way for the application of cellular therapies in autoimmune diseases. Auto-CAR-T's clinical therapeutic benefit in autoimmune disease appears to be driven by a rapid and deep depletion of B-cells in the periphery and in the lymphoid tissues, followed by an immunological reset and B-cell reconstitution.

In the B-NHL setting, activity is also driven by deep depletion of B cells, including cancerous B-cells in the periphery, and in the tissues where lesions are located, principally the lymphoid tissue. Peripheral B-cell levels can be measured in B-NHL patients, providing evidence of depletion of targeted cells in the periphery. CRs in B-NHL are assessed using the Lugano 2014 criteria which utilizes 18-fluorodeoxyglucose (FDG) PET/CT. CRs in B-NHL patients indicate disappearance of cancerous B-cells from lymphatic tissues, and therefore provide evidence that a therapy is targeting and eliminating cells of B-cell origin within tissues. An array of autoimmune diseases are driven by

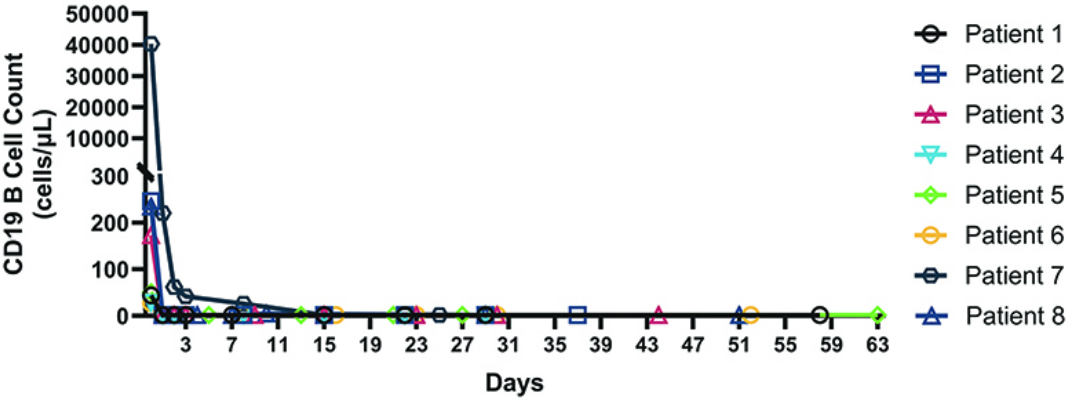
pathologic B-cells, and therefore, we believe observations of the pharmacodynamic response of a therapy or product candidate against cancerous B-cells in the periphery and in tissue in NHL patients can provide supporting evidence for the mechanism in autoimmune disease.

AlloNK Data in B-NHL

As of April 30, 2024, we had dosed 29 patients with AlloNK in combination with rituximab in our ongoing Phase 1/2 multicenter clinical trial in patients with relapsed or refractory B-NHL. The median age of the 29 patients dosed with AlloNK in combination with rituximab was 71 (range: 46 to 86), and patients had received a median of three prior lines of systemic treatment.

Peripheral B-cell Depletion in B-NHL Patients

In our ongoing Phase 1/2 B-NHL clinical trial, we have assessed peripheral B-cell levels in patients before and after treatment with the combination of AlloNK and rituximab. In all 29 patients with samples analyzed, as of March 26, 2024, following the first cycle of treatment, all patients achieved non-quantifiable peripheral B-cell levels by Day 8 (except for one patient who achieved such B-cell depletion by Day 15) following the start of therapy, regardless of B-cell levels at baseline. Preliminary data, as of March 26, 2024, below show peripheral B-cell depletion over the first cycle of treatment in all patients with detectable B-cells at baseline. We believe these preliminary data provide support for our proposed B-cell depleting mechanism of action.



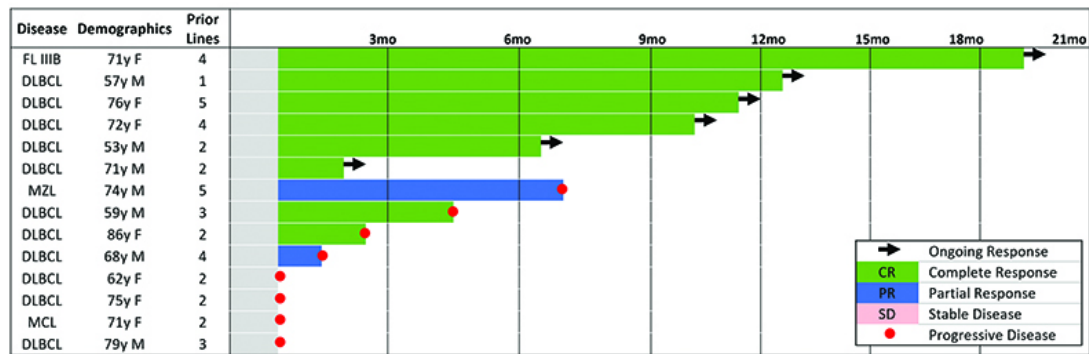
Depletion of CD19+ B-cells in NHL Patients Treated with AlloNK and Rituximab

Clinical Responses in B-NHL

AlloNK has also shown CRs in B-NHL patients, as measured using the Lugano 2014 criteria by imaging of tumor lesions, in our ongoing clinical trial. Because of the common tissues of interest, principally the lymphoid tissues, in B-NHL and autoimmune diseases, we believe data in these B-NHL patients may provide supporting evidence for our proposed mechanism of action in autoimmune disease.

Table of Contents

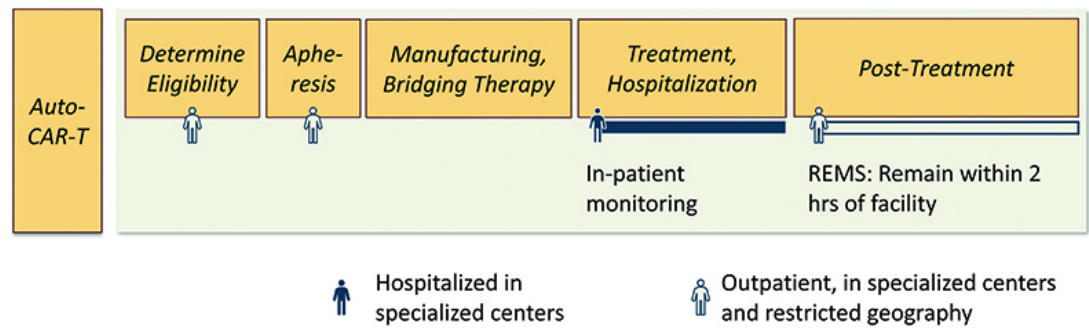
In the Phase 1 portion of this trial, as of April 30, 2024, in the fourteen patients who were naïve to CAR-T, the ORR was 71%, including eight CRs (57%) and two PRs (14%), as determined by the Lugano 2014 criteria. Thirteen of these patients had aggressive forms of B-NHL, and the CR rate in this subset, as determined by the Lugano 2014 Criteria, was 62%. As of the April 30, 2024 data cutoff date, six of the eight patients with a CR had an ongoing response (meaning continuation of the CR at all follow-up points), with five of these patients remaining progression free at six months or later. The longest responder remained progression free for at least 18 months after the start of treatment.



Clinical Responses of AlloNK in Combination with Rituximab in All Patients Naïve to Prior CAR-T in Phase 1/2 B-NHL Trial

AlloNK Patient Journey

We believe AlloNK will improve the patient and physician experience when compared to the administrative complexity and management of potential toxicities associated with auto-CAR-T. This is in contrast to auto-CAR-T, which involves multiple steps that may materially delay time to treatment including a pre-treatment eligibility determination, apheresis within a specialized center, a wait period for auto-CAR-T manufacturing, infusion scheduling and finally receipt of cryopreserved auto-CAR-T in preparation for treatment. In addition, current Risk Evaluation and Mitigation Strategy programs for commercial auto-CAR-T requires patients to remain within two hours of the treatment center for four weeks following treatment (if healthcare providers require in-patient monitoring).



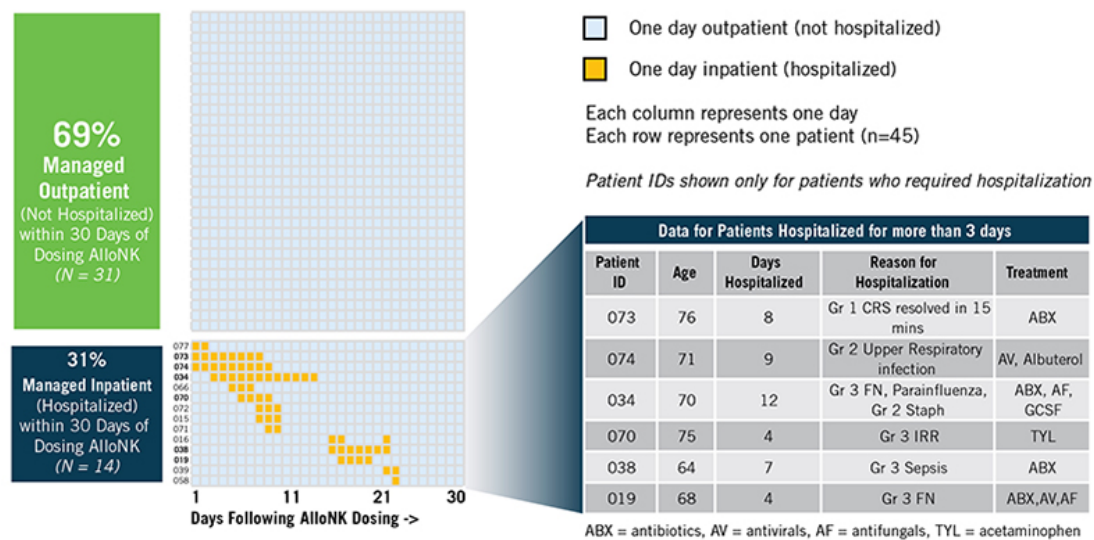
Illustrative Patient Journey on Auto-CAR-T Treatment

In contrast, AlloNK is an off-the-shelf cell therapy candidate that is cryopreserved with established end-to-end cold-chain logistics in place to enable a patient to start treatment without any prior steps. Further, AlloNK is logistically simple to administer and is in a format compatible with existing infusion center infrastructure. It is thawed at the bedside and administered in a 5-to-10 minute IV push without the need for any product formulation or processing.

In addition, AlloNK is designed to lend itself to an improved experience for the patient following treatment and we believe this will broaden access to the community setting. This is in contrast to auto-CAR-T, where mandatory hospitalization is often required in order to observe for side-effects such as CRS and ICANS. We believe AlloNK has

the potential to enable rheumatologists to treat patients in their own infusion centers as opposed to having to refer patients to tertiary care centers. In preliminary data as of April 8, 2024, from our ongoing Phase 1/2 B-NHL trial, CRS was observed in four patients (9%) and of these patients, three patients experienced a Grade 1 CRS, one patient had a Grade 2 CRS, and no ICANS was observed.

The figure below shows the number of drug-related hospitalization days for the 30 days following dosing of AlloNK for all 45 B-NHL patients who received AlloNK in combination with rituximab in our Phase 1/2 clinical trial as of April 8, 2024. As shown in the figure below, 31 patients (69%) were treated entirely in the outpatient setting and were not hospitalized for adverse events during the first 30 days following administration of AlloNK in combination with rituximab dosing. Out of the 14 patients who were hospitalized, the median length of hospitalization was three days and the reasons for hospitalizations were related to fevers and infections. Further, these were heavily pre-treated elderly patients with a median age of 68 years and median four prior lines of therapy. Because of the advanced aged and frailty of this patient population, several hospital stays were extended to accommodate the next dose of AlloNK in combination with rituximab or in an abundance of caution. We believe these preliminary data support that AlloNK in combination with B-cell targeted mAbs has the potential to be administered and managed in the community setting, which, if approved for such use, has the potential to expand access to more patients and alleviate economic and logistical burden on the healthcare system.



Number of Hospitalization Days Due to Drug-related Adverse Events in 45 Patients Treated with AlloNK in Our Phase 1/2 B-NHL Trial
AlloNK Lends Itself to a Breadth of Targeting Approaches and Indications

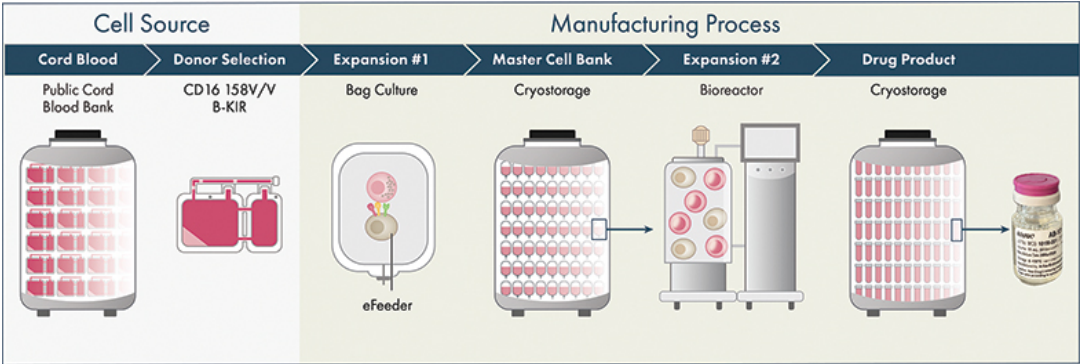
AlloNK, as a non-genetically modified, non-targeted NK cell, utilizes a mAb for targeting. Therefore, different mAbs could be used to target distinct B-cell populations based on the target cell's antigen expression. Beyond rituximab and other anti-CD20 mAbs, we have already conducted numerous preclinical studies in which we have shown cytotoxic activity of AlloNK in combination with other approved B-cell targeted mAb therapies, such as anti-CD19 and anti-CD38 mAbs. Emerging evidence with auto-CAR-T targeting the plasma cell antigen BCMA has shown therapeutic activity in several indications, and we believe AlloNK in combination with approved anti-CD38 mAbs could target a similar plasma cell population. We have the opportunity to develop AlloNK in combination with approved B-cell targeted mAbs using a variety of targets, including the potential for dual targeting by treating in combination with two mAbs. We believe this versatility will enable us to pursue a wider range of indications than cell therapies engineered against specific targets.

Our Manufacturing-first Approach

We have a manufacturing-first approach, referencing the fact that even before we were founded, our strategic partner GC Cell had already invested years pioneering the manufacturing process that we use today. Unlike most other companies in the NK field who started clinical development before establishing a scalable manufacturing process, we started clinical development with a mature and robust process in place. Our process is designed to allow us to produce off-the-shelf, allogeneic NK cell therapy candidates and to potentially meet the scale of commercial demand, with the mission to make these therapies broadly accessible for patients with devastating autoimmune diseases and cancers. We leveraged our deep expertise in NK cell biology to establish an end-to-end proprietary process in collaboration with our strategic partner, GC Cell.

Our Manufacturing Process is Designed for the Scale Needed to Support a Broadly Used Cell Therapy in Autoimmunity

Our proprietary cell therapy manufacturing platform utilizes cell expansion and activation technology developed over the past decade by our strategic partner, GC Cell. Cord blood units with preferred characteristics, including the high affinity variant of CD16 known as 158 V/V and the KIR-B haplotype, are pre-selected from cord blood banks. Approximately 15% of available cord blood units have these characteristics. NK cells from cord blood units are isolated, expanded and activated using our proprietary feeder cell process then purified and cryopreserved creating a master cell bank (MCB). Our platform allows for the introduction of an engineered vector for our CAR-NK programs at this step in the process.



Our Manufacturing Process Can Generate Thousands of Doses of AlloNK from a Single Cord Blood Unit

At the current scale, each cord blood unit is expanded to yield 50-80 cryopreserved MCB units. In turn, each MCB unit is further expanded to yield 80-100+ one billion-cell drug product vials. Drug product is vialled in an infusion-ready media and cryopreserved, providing long-term stability and ease of handling at clinical sites. The demonstrated expansion from a single cord blood unit is therefore over 4,000 one billion-cell vials which are enough to treat over 600 autoimmune patients assuming two billion AlloNK cells per dose and three doses for a treatment regimen of an aggregate of six billion AlloNK cells total per patient with autoimmune disease. To date, we and GC Cell have produced over 35 clinical batches of AlloNK, producing thousands of AlloNK vials at one billion cells per vial, and have demonstrated both batch-to-batch and donor-to-donor consistency.

At our San Diego headquarters, we have established a 9,000 square foot, purpose-built cGMP cell production center, to support NK and CAR-NK cell production for our pipeline development, clinical trial and potentially commercial supply. At the current 50-liter scale, this facility has the potential to produce over 6,000 one billion-cell vials annually. We are currently developing a 200-liter, commercial-scale process that has the potential to efficiently supply many thousands of patients with a COGS below \$1,000 per one billion-cell vial. Assuming two billion AlloNK cells per dose and three doses for a treatment regimen of an aggregate of six billion AlloNK cells total per patient with autoimmune disease, we believe AlloNK COGS per patient would be below \$6,000, an order of magnitude below the current COGS of auto-CAR-T.

AlloNK

AlloNK is an allogeneic, off-the-shelf, cryopreserved NK cell therapy candidate designed to enhance the ADCC effect of mAbs to drive B-cell depletion. AlloNK is designed to be administered in the community setting. Using our proprietary cell therapy manufacturing platform, we can generate thousands of doses of cryopreserved, infusion-ready AlloNK from a single cord blood unit.

We are currently evaluating AlloNK in combination with rituximab or obinutuzumab in a Phase 1/1b open-label multi-center clinical trial in patients with class III or class IV LN who previously failed treatment, for which the FDA has granted Fast Track designation to improve disease activity in patients with class III or class IV LN. In addition, in April 2024, the FDA cleared an IND submitted by IRIS, a large community practice rheumatology clinic in Florida, to conduct a basket IIT to assess the safety, tolerability and clinical activity of AlloNK in combination with rituximab in patients with RA, PV, GPA / MPA and SLE. We intend to pursue additional autoimmune diseases with AlloNK in combination with B-cell targeted mAbs. We expect to report initial data on autoimmune indications from at least one of our Phase 1/1b trial or the basket IIT in the first half of 2025.

We initially evaluated AlloNK in B-NHL patients, where AlloNK in combination with rituximab has demonstrated deep depletion of peripheral B-cells and CRs in our ongoing Phase 1/2 clinical trial. We also received Fast Track designation for AlloNK for intravenous (IV) infusion in combination with rituximab for the treatment of relapsed or refractory B-NHL to improve cancer response rates. Fast Track designation does not guarantee an accelerated review of AlloNK or increase the likelihood that AlloNK will receive regulatory approval by the FDA. We have completed enrollment in our Phase 1/2 trial exploring AlloNK in patients with relapsed or refractory B-NHL. We will continue to follow patients to assess duration of responses and will determine the future development path as longer-term follow-up data is assessed.

AlloNK Development in Autoimmune Diseases

LN Background

LN, a type of kidney disease, is a manifestation of SLE, an autoimmune disease characterized by autoantibody production and deposition of immune complexes with complement activation, resulting in inflammation and damage within the affected tissue, which contributes significantly to the disease's morbidity and mortality rates. LN is reported to affect approximately half of all patients with SLE. LN occurs when autoantibodies affect parts of the kidneys that filter out waste, which can result in swelling, weight gain from fluid retention, elevated blood pressure and urine that appears foamy from excessive protein loss. Diagnosis often reveals proteinuria, or the presence of excessive protein in the urine, blood in the urine, and lowered serum albumin levels.

The primary aim of managing LN involves preventing irreversible kidney damage, typically through anti-inflammatory and immunosuppressive therapies like steroids, MMF and cyclophosphamide to alleviate inflammation and blood pressure medications that protect the kidneys. Despite the availability of potent therapies, up to 10% of LN patients still progress to end-stage renal disease, requiring dialysis and eventually, a kidney transplant. There are an estimated 210,000 SLE patients with LN across the United States and Europe, and approximately 30% do not respond to currently available treatments. Furthermore, chronic use of these therapies typically creates secondary complications for patients, including, but not limited to, increased risk of infections and cancer, cardiovascular disease, hypertension, Cushing's disease, diabetes and osteoporosis.

Rationale for AlloNK in LN

We are focusing on LN as the first target of our clinical development program in light of the clearly identifiable patient group, significant unmet need and presence of measurable clinical endpoints to facilitate regulatory approval submissions.

LN offers an objective clinical marker for tracking disease activity and renal impairment: proteinuria. This marker enables the use of the UPCR to assess renal function, making it a reliable and objective endpoint. The reduction of proteinuria, as determined by UPCR, is an important component of CRR, which has been historically used as a critical measure to evaluate a patient's response to treatment for LN in clinical trials.

Table of Contents

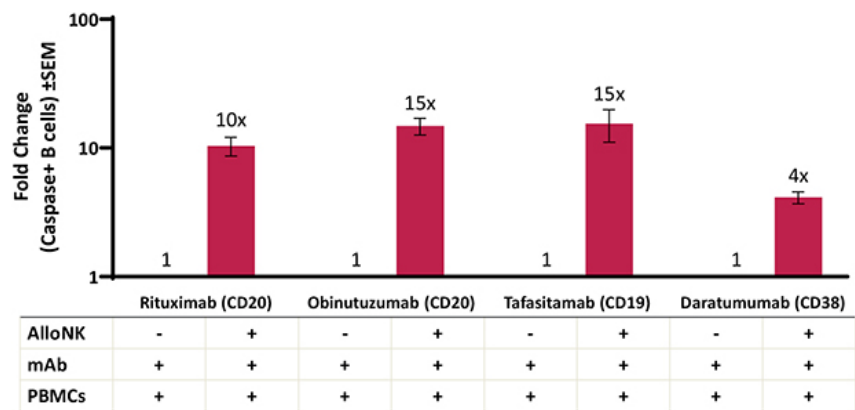
B-cells are recognized as key mediators of SLE pathogenesis and B-cell targeted mAbs direct B-cell killing via ADCC and induction of apoptosis. However, studies have shown that B-cell depletion is incomplete in the tissues of certain patients following rituximab treatment, leading to pathogenic B-cell escape and hindering effective reset of the immune system. NK cells from SLE patients have been shown to be reduced in number in peripheral blood, with reports of SLE patients having less than half as many CD16+ NK cells as healthy subjects. Further, the phenotype of NK cells in SLE patients can result in reduced cytotoxicity as well as defective ADCC, which could lead to incomplete B-cell depletion by rituximab. In several preclinical studies, AlloNK potentiated anti-CD20-mediated ADCC against CD20-expressing malignant B-lymphocytes in vitro and in vivo and was not negatively affected by steroids. Further, AlloNK induced B-cell apoptosis in combination with rituximab and obinutuzumab in peripheral blood mononuclear cells (PBMCs) isolated from SLE patients.

AlloNK Preclinical Results in LN and SLE

In vitro preclinical studies, we evaluated the cytotoxic activity of AlloNK in combination with rituximab or obinutuzumab mAbs against PBMCs isolated from SLE patients. PBMCs combined with thawed AlloNK were incubated with or without antibodies (0.0.01, 0.1.1 ug/mL) at different effector (AlloNK cell) to target (PBMCs) ratios (E:T ratios) for four hours. The E:T ratios tested were 0.2:1, 1:1, and 2:1 AlloNK to PBMCs. Apoptotic (caspase positive) B-cells in SLE PBMCs were quantified by flow cytometry.

ADCC against SLE B-cells was observed when AlloNK was combined with rituximab or obinutuzumab in an antibody concentration-dependent and an E:T ratio-dependent manner. Shown below is data from an E:T ratio of 1:1 at a single antibody concentration. The specificity of cell killing in the SLE PBMC sample was evaluated by examining the effects of the combination on SLE T-cells. Importantly, little to no off-target apoptosis was observed in this cell population in the presence of AlloNK and either of the antibodies tested. In addition to anti-CD20 mAbs, we have conducted in vitro preclinical studies of AlloNK in combination with tafasitamab, an anti-CD19 antibody, or daratumumab, an anti-CD38 antibody, which demonstrated specific killing of B-cells from SLE PBMCs.

Data below shows fold change in B-cell killing when mAb (0.1µg/mL) was combined with AlloNK in a 1:1 ratio with SLE PBMCs (n=3–6 SLE PBMC donors). Increased B-cell apoptosis was observed when AlloNK was combined with B-cell targeting mAbs, which we believe demonstrates enhanced ADCC with the mAb combinations.



Fold Change in B-cell Killing when AlloNK was Added to mAb in SLE PBMCs. AlloNK was Added in a 1:1 ratio to PBMCs, with mAb at 0.1µg/mL (n=3–6 SLE PBMC donors)

AlloNK Clinical Development in LN

In April 2024, we began dosing patients in our Phase 1/1b open-label, multi-center clinical trial of AlloNK in combination with rituximab or obinutuzumab in patients with class III or class IV LN who previously failed treatment. The trial is designed as a two-stage trial. We plan to enroll up to six patients per cohort in dose escalation (stage 1) with a 3+3 design, and up to a total of 12 patients per cohort in the cohort expansion (stage 2), inclusive of those patients from the corresponding cohort in stage 1. An initial three patients will receive AlloNK without mAb, followed by cohorts of AlloNK at two dose-levels given in combination with rituximab or obinutuzumab. AlloNK dosing will

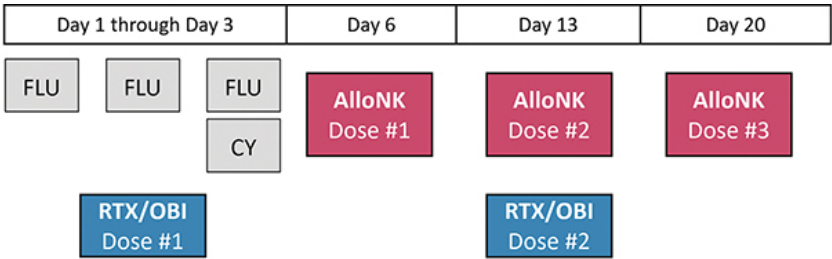
[Table of Contents](#)

start at one billion total cells per dose, and the rituximab cohort can enroll in parallel with the obinutuzumab cohort. The protocol allows dose escalation to four billion total cells per dose, with rituximab and obinutuzumab combination cohorts enrolling in parallel.

The primary objective of the clinical trial is to assess the safety, tolerability and preliminary activity of AlloNK in combination with rituximab or obinutuzumab. The primary efficacy endpoint is the overall renal response rate (ORRR) defined as the proportion of subjects having either a complete renal response (CRR) or partial renal response (PRR) at 52 weeks. A CRR is defined as achieving a UPCR of less than 0.5 and normal renal function as determined by serum creatinine levels at or below the upper limit of normal without worsening of baseline serum creatinine by more than 15%. A PRR is defined as a 50% or more reduction in UPCR from baseline, to an absolute value of less than one, or to less than three if baseline UPCR was above three, and serum creatinine not increased by more than 15% from baseline. We will also collect global disease activity measurements using the hybrid SELENA-SLEDAI assessment, and translational biomarkers, including levels of autoantibodies, serum complement, serum immunoglobulins, and peripheral B-cell subsets.

In auto-CAR-T studies, an initial lymphodepletion regimen has been utilized consisting of cyclophosphamide and fludarabine, which depletes B-cells among other lymphocytes. Our clinical development approach in LN is to investigate our product candidate utilizing a similar initial lymphodepletion regimen followed by treatment with AlloNK in combination with a B-cell targeted mAb. We utilize combination with rituximab to target CD20, an antigen present on B-cells in many of the same lineages that express CD19. In a clinical study of rituximab in SLE published by Vital et. al. in 2011, when complete depletion of CD20-expressing B-cells was achieved, depletion of CD19-expressing, CD20-negative plasmablasts was also observed, suggesting that CD20 targeting can potentially deplete a broad range of B-cells, including plasmablasts. Further, in our B-NHL trial, AlloNK in combination with rituximab was observed to drive deep B-cell depletion in the periphery, as measured by CD19 expression, which we believe indicates that this regimen can potentially deplete CD19-expressing B-cell lineages. We believe this has the potential to mirror the approach of auto-CAR-T cell therapy in achieving an initial, generalized lymphodepletion before attacking the pathogenic B-cells, with the goal of achieving deep B-cell depletion.

The treatment schedule is outlined below. The lymphodepletion treatment regimen consists of three daily doses of 30 mg/m² fludarabine and a single dose of 1000 mg/m² cyclophosphamide, a very similar regimen as utilized in studies led by Schett. Rituximab or obinutuzumab is given in two doses of 1000 mg each, the same regimen used in autoimmune indications such as RA. AlloNK is given in three weekly doses at either one billion or four billion total cells per dose. All patients will receive at least one treatment cycle followed by scheduled assessments of overall health and response status. Patients who have not achieved a CRR are eligible for a second cycle, as described above, at six months, while patients who achieve a CRR will receive additional doses of the assigned mAb only at six months. In addition, patients in the monotherapy cohort are eligible for a full cycle of treatment, including lymphodepletion, mAb and AlloNK, at six months. We dosed our first patient in this trial in April 2024, and the DLT assessment period has been cleared. We are exploring expanding from LN to SLE broadly.



FLU: fludarabine 30mg/m²; CY: cyclophosphamide 1g/m²;
RTX: rituximab 1000mg; OBI: obinutuzumab 1000mg

Treatment Regimen for AlloNK in Combination with B-cell Targeted mAbs in a Phase 1/1b Trial in Class III or Class IV LN

[Table of Contents](#)

AlloNK Development in Additional Autoimmune Indications

We believe that AlloNK has the potential to impact multiple additional B-cell mediated autoimmune indications beyond LN. We are exploring the potential of AlloNK in these indications and other antibody combinations through company-sponsored clinical trials and by supporting IITs.

We believe supporting IITs, where we provide patient access to AlloNK by supplying AlloNK for use in IITs, allows us to prioritize patient needs while providing us insight that has the potential to support expansion of our development programs into additional indications where we believe AlloNK in combination with B-cell targeted mAbs has the potential to benefit patients who are refractory to existing therapies.

B-cell depletion has a therapeutic activity in multiple additional autoimmune indications as evidenced by indications where mAbs targeted against CD20 such as rituximab and ocrelizumab are approved, as well as data from the study led by Schett. These indications include RA, PV and GPA, formerly known as Wegener's granulomatosis, MPA, idiopathic inflammatory myositis (IIM), SSc, MG and MS.

Rituximab is approved for certain RA, PV, and GPA / MPA indications. RA is a chronic inflammatory disorder that primarily affects joints, but can also have systemic effects, impacting various organs and tissues in the body. PV is a rare, chronic autoimmune disorder characterized by antibodies against desmogleins and the formation of blisters and erosions on the skin and mucous membranes, most commonly affecting the mouth, throat, nose, eyes, genitals and lungs. AAV is a group of rare autoimmune diseases of unknown cause characterized by anti-neutrophil cytoplasmic antibodies, and encompassing the subtypes GPA, which affects various organs, including the kidneys, lungs and upper respiratory tract, and MPA, which often involves the kidneys and lungs but can affect any organ system.

The Schett group developed clinical data, which we believe support the potential of B-cell depleting cell therapy in treating IIM and SSc. IIM is a group of autoimmune conditions characterized by inflammation of muscle (myositis) and other organ systems, resulting in widespread organ dysfunction. For patients with severe disease, symptoms can be debilitating, and can lead to mortality, especially when lungs are involved. SSc is a persistent, systemic autoimmune disease characterized by autoantibodies against transcriptional and translational components, including topoisomerase, centromeres and RNA polymerase, resulting in vascular damage and fibrosis. A significant portion of SSc patients develop interstitial lung disease (ILD), and for those who develop pulmonary hypertension, the three-year mortality rate exceeds 60%.

B-cell depletion has also shown therapeutic effects in neuroinflammatory diseases like MS and MG. MS is a long-term condition affecting the central nervous system, leading to neurodegeneration caused by inflammation. Ocrelizumab, a B-cell targeting anti-CD20 mAb, was approved in 2017 for treatment of relapsing MS and primary progressive MS, underscoring the role of B-cells in influencing relapse frequency and disease advancement in MS. MG is a chronic autoimmune disorder in which antibodies destroy the communication between nerves and muscle, resulting in weakness of the skeletal muscles, and case reports have shown an impact of B-cell-targeted auto-CAR-T.

In these other autoimmune and neuroinflammatory diseases, some patients with severe disease or who are refractory to prior therapies require continuous treatment with immunosuppressive regimens, including steroids, leading to long-term health consequences. We believe a therapy that could allow for a period of drug-free remission could therefore fill a significant unmet need for patients.

Investigator-Initiated Basket Trial

In April 2024, the FDA cleared an IND submitted by IRIS, a large community practice rheumatology clinic in Florida, to conduct a basket ITT to assess the safety, tolerability, and clinical activity of AlloNK in combination with rituximab. The IIT will initially enroll patients with RA, PV, GPA / MPA and SLE.

The IIT will be a basket trial, which is a clinical trial that evaluates how well a therapy works in patients with different diseases that share a common characteristic, such as different autoimmune indications. The basket design will utilize an initial safety run-in stage of nine all-comers patients with any of the four included indications, followed by expansion cohorts to enroll a total of six patients per cohort for PV and GPA /MPA, and nine patients per cohort for RA and SLE. All patients will receive a single cycle of treatment, consisting of cyclophosphamide and fludarabine lymphodepletion, rituximab, and AlloNK. The dosing regimen leverages the standard of care dose and

schedule of rituximab for each indication, with AlloNK given in three weekly doses of one billion total cells per dose. The primary objective of the clinical trial is to assess the safety, tolerability and preliminary activity of AlloNK in combination with rituximab. Primary efficacy endpoints specific to each indication (RA, PV, GPA / MPA and SLE) will be used. We also anticipate assessing translational biomarkers, including levels of autoantibodies relevant in each indication, serum complement levels, serum immunoglobulin isotypes, peripheral B-cell subsets, and peripheral levels of AlloNK for pharmacokinetic analysis. We expect to report initial data on autoimmune indications from at least one of our Phase 1/1b trial or the basket IIT in the first half of 2025.

Pursuant to a institution-initiated and sponsored clinical trial agreement with IRIS, we will provide support and supply AlloNK and funding for study-related expenses for the IIT, but unlike our sponsored clinical trials, IRIS will be the regulatory sponsor of, and responsible for the conduct of the IIT. This IIT is not part of our clinical trials for AlloNK and data from this trial is reported by the relevant investigator. While we do not expect to be able to use the results from this IIT in our applications for marketing approval to the FDA or other comparable foreign regulatory agencies, we believe that this strategy may provide some competitive advantage as we will be able to acquire additional clinical insights beyond highly focused clinical trials in specific geographies and additional indications.

AlloNK Development in Non-Hodgkin Lymphoma

Non-Hodgkin Lymphoma Background

NHL is a neoplasm of the lymphoid tissues originating from B-cell precursors, mature B-cells, T-cell precursors and mature T-cells. Approximately 85% are B-cell malignancies. Currently available NHL treatments like auto-CAR-T products targeting CD19 have shown promise in aggressive lymphomas but we believe they are associated with life-threatening safety risks, have limited access and are slowly administered due to manufacturing inefficiencies.

AlloNK Clinical Development in B-NHL

We have tested AlloNK in combination with rituximab in 29 patients with relapsed or refractory B-NHL in our ongoing Phase 1/2 clinical trial with data, as of a April 30, 2024 cutoff date. The clinical trial also enrolled 16 patients in monotherapy cohorts, consisting of lymphodepletion and AlloNK without rituximab. The Phase 1 portion of the study is evaluating two AlloNK dose levels, four-weekly doses of either 1×10^9 cells or 4×10^9 cells per dose, as monotherapy or in combination with rituximab using the 3+3 dose escalation method. The primary objective of the clinical trial is to assess the safety and anti-tumor activity of AlloNK in combination with rituximab.

In our trials, clinical activity is primarily determined by responses as measured by the Lugano 2014 criteria using both modalities as described in the table below. The criteria classify clinical activity or treatment response as CR, PR, stable disease or progressive disease. The Lugano classification recommends the Deauville five-point scale for reporting response by FDG PET-CT. The Deauville five-point scale scores responses as follows (where 1 is best and 5 is the worst): (1) no uptake or no residual uptake (when used interim), (2) slight uptake, but equal to or below blood pool (mediastinum), (3) uptake above mediastinal, but below or equal to uptake in the liver, (4) uptake slightly to moderately higher than liver or (5) markedly increased uptake or any new lesion (on response evaluation). A summary of the Lugano 2014 criteria is described below.

[Table of Contents](#)

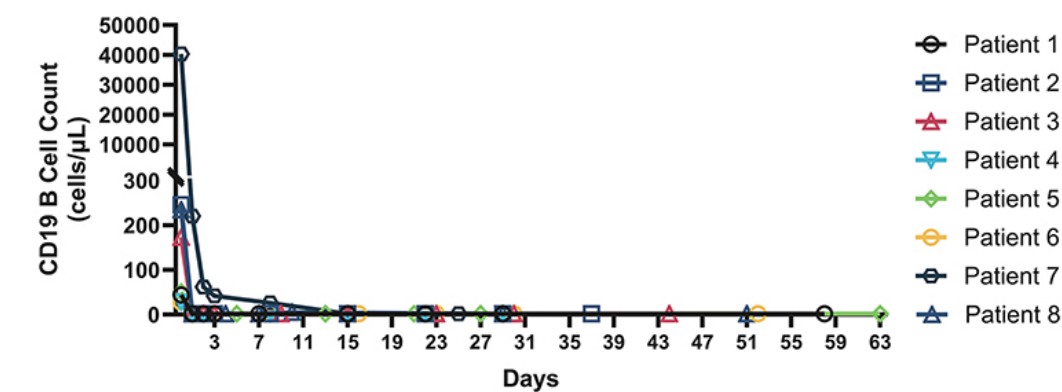
	CT-Based Response	FDG PET-CT-Based Response
Complete Response	Lymph nodes ≤ 1.5 cm in LDi Complete disappearance of radiologic evidence of disease	Scores 1, 2, 3 (Deauville scale) in nodal or extranodal site with or without a residual mass Complete metabolic response
Partial Response	Single lesion: 50% or greater decrease in SPD of up to six lymph nodes or extranodal sites	Scores 4 or 5 (Deauville scale) with decreased uptake compared with baseline and residual mass(es) of any size
Stable Disease	Less than 50% decrease in SPD of up to six lymph nodes or extranodal sites (no criteria for progressive disease are met)	Scores 4 or 5 (Deauville scale) with no significant change in FDG uptake
Progressive Disease	1) New lymphadenopathy or increased; single node must be abnormal with: a) LDi > 1.5 cm and b) PPD $\geq 50\%$ and c) LDi or SDi increased 0.5 cm if ≤ 2.0 cm and increased 1.0 cm if > 2.0 cm 2) Increased splenic volume: a) with prior splenomegaly: greater than 50% increase of its prior increase beyond baseline b) without prior splenomegaly: greater than 2.0 cm increase c) New or recurrent splenomegaly 3) New or clear progression of preexisting nonmeasured lesions 4) Regrowth of previously resolved lesions 5) New extranodal lesion > 1.0 cm in any axis (new lesions < 1.0 cm in any axis are included if presence is unequivocal and attributable to lymphoma) 6) A new node > 1.5 cm in any axis 7) Assessable disease of any size if unequivocally attributable to lymphoma	Scores 4 or 5 (Deauville scale) In any lesion with increased uptake from baseline and/or new FDG-avid focus consistent with malignant lymphoma
LDi = longest transverse diameter; SDi = shortest transverse diameter; PPD = product of perpendicular diameters; SPD = sum of the product of the perpendicular diameters of multiple lesions; FDG = fluorodeoxyglucose		

Lugano 2014 Criteria Table For Lymph Nodes and Extralymphatic Sites

All patients receive lymphodepleting chemotherapy for three days prior to treatment of AlloNK and low-dose subcutaneous IL-2 after each dose of AlloNK. Patients in the combination cohorts received up to two cycles of treatment with lymphodepletion, with the third and fourth cycle, if eligible, given without lymphodepletion. A third cohort was added to test a bi-weekly dosing schedule of AlloNK in combination with rituximab but without the administration of IL-2. Patients in this cohort received up to three cycles of treatment with lymphodepletion. Any patient experiencing clinical benefit (stable disease (SD), PR or CR, per the Lugano 2014 criteria) after one cycle of treatment with AlloNK and rituximab is eligible for additional cycles of AlloNK plus rituximab. The median age of the 29 patients dosed with AlloNK in combination with rituximab was 71 (range: 46 to 86), and patients had received a median of three prior lines of systemic treatment.

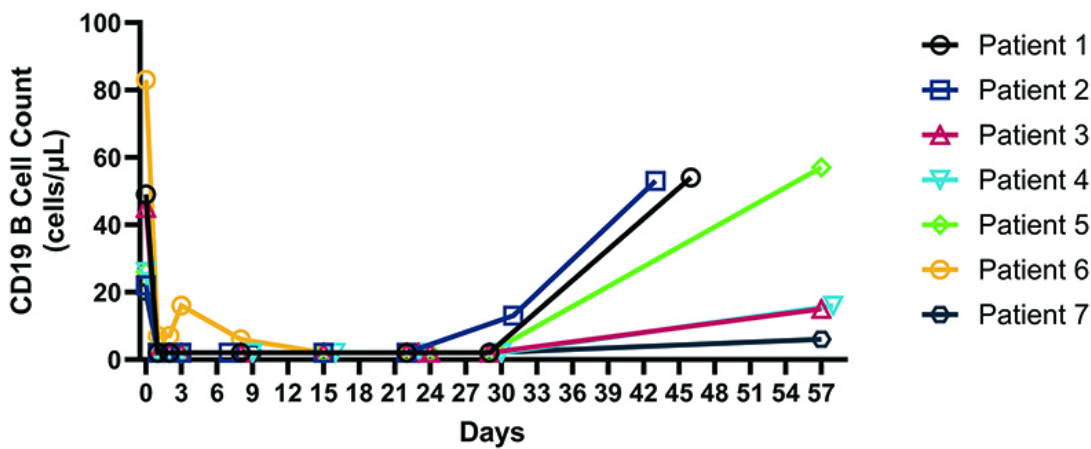
B-cell Depletion in B-NHL Patients

Blood samples were drawn at specified timepoints during the course of the trial. B-cell depletion was assessed in whole blood samples using the TBNK cells assay (BD Multitest 6-color TBNK Reagent). In 29 patients treated with the combination of AlloNK and rituximab with samples analyzed, as of a March 26, 2024 cutoff date, we observed that all patients achieved non-quantifiable peripheral B-cell levels by Day 8 (except for one patient who achieved such B-cell depletion by Day 15) following the start of a single cycle of therapy, regardless of B-cell levels at baseline. Preliminary data below, as of March 26, 2024, demonstrates peripheral B-cell depletion over the first cycle of treatment in all patients with detectable B-cells at baseline.



Peripheral Depletion of CD19+ B-cells in NHL Patients Treated with AlloNK and Rituximab

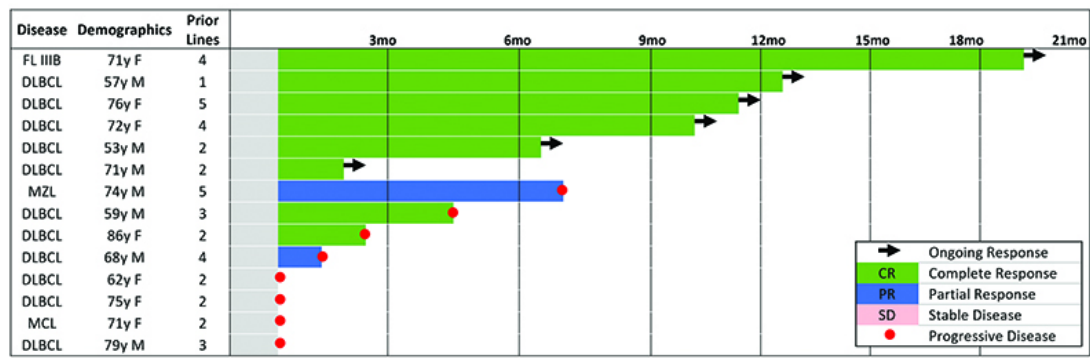
Further, we assessed peripheral B-cell levels in patients treated in the monotherapy cohorts. Data, as of May 15, 2024, showed initial non-quantifiable peripheral B-cell depletion in seven monotherapy patients with detectable B-cells at baseline. This B-cell depletion was maintained in the majority of patients through approximately four weeks after the initial AlloNK dose. In contrast to the combination therapy cohorts, B-cell levels in the monotherapy patients began to increase approximately four to eight weeks after the initiation of treatment.



Peripheral Depletion of CD19+ B-cells in NHL Patients Treated in Monotherapy Cohorts (Lymphodepletion and AlloNK without Rituximab)

Clinical Responses in B-NHL Patients

Of the 29 patients treated with AlloNK in combination with rituximab, as of April 30, 2024, 14 patients (48%) were not exposed to prior CAR-T. In these patients, the ORR was 71%, including eight CRs (57%) and two PRs (14%). Thirteen of these 14 patients had aggressive forms of NHL, with one patient having indolent marginal zone lymphoma but having previously failed five prior lines of therapy. As of the April 30, 2024 data cutoff date, six of the eight patients with a CR had an ongoing response (meaning continuation of the CR at all follow-up points), with five of these patients remaining progression free at six months or later. The longest responder remained progression free for at least 18 months after the start of treatment.



Clinical Responses of AlloNK in Combination with Rituximab in All Patients Naïve to Prior CAR-T in Phase 1/2 B-NHL Trial

Fifteen patients (52%) treated with AlloNK in combination with rituximab received prior CAR-T, of which 13 (45%) received commercial auto-CAR-T-therapies. The ORR in the 15 patients exposed to prior cell therapies was observed to be 40% including four CRs and two PRs.

[Table of Contents](#)

Preliminary Safety Data

As of April 8, 2024, a total of 45 patients were evaluated for safety across all cohorts in our Phase 1/2 B-NHL trial (16 monotherapy and 29 in combination with rituximab). The median age at enrollment was 68 years and patients had a median of four prior lines of systemic therapy. All, except for one monotherapy patient, received prior anti-CD20 mAb.

Only one dose-limiting toxicity (DLT) of an infusion-related reaction was observed across all combination cohorts. The maximum tolerated dose was not reached, and AlloNK at four billion cells per dose was deemed to be the maximum administered dose. CRS was observed in four of 45 patients (9%), with no Grade 3 or higher CRS reported. Three patients experienced a Grade 1 CRS and one patient had a Grade 2 CRS. Cytokine analysis of samples from 40 patients treated with AlloNK showed IL-6 concentrations below 100 pg/mL at all time points analyzed, including samples from the 4 patients where CRS was reported. These IL-6 levels were below the lower limit of the range typically associated with CAR-T-related CRS. No other cell therapy associated treatment emergent adverse effects were observed, including ICANS or graft-versus-host disease. Serious treatment emergent adverse events (TEAEs) occurred in almost half of the 45 patients treated across all cohorts, and the most common (experienced by two or more patients) were febrile neutropenia (11%), sepsis (9%), infusion-related reactions and malignant progression (7% each), and pneumonia and pyrexia (4% each). Serious TEAEs related to AlloNK were observed in seven out of 45 patients (16%) treated across all cohorts, and consisted of infusion-related reactions (7%), febrile neutropenia (4%), and CRS and pyrexia (2% each).

Among the 29 subjects treated with AlloNK in combination with rituximab, the most common severe (Grade ≥ 3) TEAEs reported were associated with hematological disorders, which we consider to be consistent with the usage of lymphodepletion in this patient population, and included leukopenia (86%), neutropenia (83%), lymphopenia (76%), anaemia (45%) and thrombocytopenia (28%). The only other TEAEs observed in $\geq 10\%$ of the patients treated with AlloNK in combination with rituximab were febrile neutropenia (10%), sepsis (10%) and infusion-related reactions (10%).

System Organ Class (SOC)/ Preferred Term, n (%)	Rituximab Combination (n=29)	Overall (n=45)
Leukopenia	25 (86)	36 (80)
Neutropenia	24 (83)	36 (80)
Lymphopenia	22 (76)	30 (67)
Anaemia	13 (45)	14 (31)
Thrombocytopenia	8 (28)	9 (20)
Febrile neutropenia	3 (10)	6 (13)
Sepsis	3 (10)	4 (9)
Infusion-related reaction	3 (10)	3 (7)

Grade 3 or higher treatment emergent adverse events (TEAEs) observed in $\geq 10\%$ of the patients treated with AlloNK in our Phase 1/2 clinical trial in B-NHL

Partnered Programs

AlloNK in HL

Our ongoing collaboration with Affimed involves investigating AlloNK in combination with acimtamig, a CD30-targeted NK cell engager, in HL and potentially other CD30+ cancers. Classical HL is a type of cancer that originates from lymphocytes, leading to the growth of abnormal cells in the lymphatic system. The disease is characterized by the presence of Reed-Sternberg cells which highly express the CD30 antigen, making CD30 a crucial target for certain therapies and a marker for diagnosing and monitoring the disease's progression. Preclinical data showed *in vitro* cytotoxicity and *in vivo* anti-tumor activity with AlloNK, in combination with acimtamig, against a CD30+ T-cell lymphoma cell line.

In November 2022, we announced a strategic partnership to jointly develop, manufacture, and, if approved, commercialize a combination therapy comprising of acimtamig with AlloNK. Affimed chose us as a partner to commercialize the combination based on the preclinical and clinical evidence of activity of AlloNK observed in NHL to date and our manufacturing expertise to provide cryopreserved NK cells for a multi-center trial and the potential to produce a cryopreserved, off-the-shelf, commercially-viable product.

Under the agreement, Affimed will lead regulatory activities through clinical development and, if approved via the accelerated approval pathway, any confirmatory studies. Affimed will be responsible for funding clinical study costs, while we will be responsible for the costs of supplying AlloNK and IL-2 for such studies. If accelerated approval is obtained, we may continue in the collaboration and share confirmatory study costs on a 50/50 basis, and in return revenues from the combination will be shared in a proportion of 67%/33% (Affimed/Artiva). Affimed will be responsible for promotional activities and expenses of the combination therapy, if approved. We retain commercialization and distribution rights and book sales for AlloNK.

The Phase 2 LuminICE-203 trial is currently enrolling patients with relapsed or refractory HL, and Affimed presented initial data from the first seven patients in June 2024. The initial run-in phase is evaluating four cohorts with two doses of acimtamig and two doses of AlloNK. In each cohort, patients are given an initial lymphodepletion regimen of cyclophosphamide and fludarabine, followed by six weekly treatments. The first three weekly treatments consist of acimtamig infusion, followed by infusion of AlloNK and IL-2. The last three weekly treatments consist of acimtamig infusion alone. Following the run-in portion, the trial will follow a Simon two-stage design, with up to two dose cohorts tested in Stage 1 and one-to-two cohorts in Stage 2. The trial will also include an exploratory cohort in peripheral T-Cell lymphoma (PTCL).

CAR-NK Programs

Our manufacturing platform also allows for the generation of CAR-targeted NK cells utilizing cord blood starting material with the same pre-selected characteristics and scale-up process as AlloNK. We own ex-APAC rights for AB-201, a HER2 targeting CAR-NK cell, and for AB-205, a CD5 directed CAR-NK.

Platform to Create Gene-Modified NK Cells

As an alternative to targeting NK cells to tumors by combining with mAb therapy or NK-engager bispecific technology, NK cells may be targeted directly through the addition of a CAR against a defined target antigen. This is accomplished through genetic modification of the NK cell and can also include the addition of cytokine transgenes to further enhance the activity and persistence of these CAR-NK cells. We believe these modifications can turn NK cells into the kind of flexible, potent and allogeneic therapy that CAR-T cells were intended to become. In particular, we believe that the potential therapeutic applications of NK cells can be expanded by two types of gene modifications:

1. **Addition of CAR constructs to direct NK cells to specific antigens:** We introduce CAR constructs to our cord-blood derived NK cells via a lentiviral vector. This virus vector is manufactured under cGMP conditions in the United States prior to being transferred to the GC Cell manufacturing facility in Korea where it is combined with NK cells during the first expansion phase of our manufacturing process. Our CAR constructs have been designed to enhance the activity of our NK cell product candidates based on extensive empirical evaluation of costimulatory domains alone and in combination. In our preclinical studies, CAR-NK cells that contain the costimulatory domain OX40L used in our CAR construct exhibited greater cytotoxic potential than structures used in other T-cell and NK cell programs.

- 2. Enhancement of viability and potency through overexpression of cytokines:** IL-15 promotes NK cell viability, proliferation and function. Transduction of NK cells with gene constructs that lead to expression of IL-15 increased their cytotoxic potential in preclinical studies. Further, IL-15 expression has been associated with increased cell persistence in third-party human clinical studies. Expression of IL-15 in our CAR-NK cells has resulted in high viability in culture and our AB-201 product candidate expresses the IL-15 transgene. Our preclinical studies showed that the IL-15 co-expressed from the CAR lentivirus resulted in persistence of AB-201 cells in the circulation of mouse models beyond Day 30 and peak detection in lung and spleen tissues at Day 15. This was substantially longer than the persistence seen for cord blood-derived NK cells not expressing IL-15.

AB-201

AB-201 is an allogeneic anti-HER2 CAR-NK cell product candidate, containing a CAR with a proprietary HER2 antigen recognition domain and expressing soluble IL-15. HER2, also known as Human Epidermal Growth Factor Receptor 2 or ErbB2, is a receptor tyrosine kinase that is overexpressed on many solid tumors, such as breast, gastric and esophageal, and bladder cancers. AB-201 has shown specific cytotoxic activity against HER2+ tumor cells in vitro and anti-tumor activity and tumor infiltration in vivo. AB-201 is designed to bind to a region distinct from other HER2-targeting drugs, such as trastuzumab and pertuzumab. We have received orphan drug designation for AB-201 in the United States.

It is estimated that there are over 50,000 patients diagnosed annually in the United States with tumors having high expression of HER2, with overexpression found in approximately 10% to 15% of breast cancer cases and in over 10% of bladder and esophageal cancers. Many breast cancer patients with HER2+ localized disease experience pathologic complete responses when treated with HER2-directed therapies. However, for patients who relapse and for those who present initially with metastatic disease, current treatments can provide clinical responses but are not curative, and prognosis generally worsens with each subsequent line of therapy. HER2 is expressed in a subset of gastric, gastro-esophageal junction and esophageal cancers. Each year, over 5,000 patients in the United States begin various lines of treatment for HER2+ disease. Trastuzumab and fam-trastuzumab deruxtecan are approved for use in HER2+ gastric cancer, but a significant unmet medical need remains with only about half of patients responding to these therapies in first-line treatment and fewer than 30% of patients responding in third and later lines. HER2 is also expressed in a subset of bladder cancers. Each year, over 5,000 bladder cancer patients in the United States receive treatment for cancer that expresses HER2, but there are no approved HER2-directed therapies in bladder cancer.

AB-205

AB-205 is an allogeneic anti-CD5 CAR-NK cell product candidate, containing a CAR with a CD5 antigen recognition domain and expressing soluble IL-15. CD5 is a T-cell activation marker and negative regulator of TCR signaling expressed on tumor cells in the majority of cases of T-cell lymphoma and leukemia. Our partner, GC Cell, has observed specific cytotoxic activity against CD5+ T-cell leukemia cell lines, CCRF-CEM and RPMI-8402, with AB-205 in vitro and meaningful anti-tumor activity in vivo.

CD5 is expressed in a large number of cases of T-cell lymphoma (TCL) and T-cell Acute Lymphoblastic Leukemia (T-ALL). TCL accounts for 10-15% of all NHL cases and is categorized as cutaneous (CTCL) or more aggressive PTCL forms. PTCL, which accounts for approximately half of TCL cases, can be further subdivided into subtypes, with an estimated 80% of all cases expressing CD5. The CD30-targeted antibody drug conjugate Adcetris (brentuximab vedotin, BV) is used in PTCL, with the highest efficacy in the anaplastic large cell lymphoma (ALCL) subtype which uniformly expresses CD30. However, approximately 15% of ALCL patients are refractory or quickly progress following BV, while another 50% of ALCL patients initially respond, but ultimately progress after BV. Further, efficacy of BV and expression of CD30 in other PTCL subtypes is varied. There remains an unmet need for effective and safe therapies in these populations.

CAR-NKs may be an especially advantageous construct for targeting cancers of T-cell origin because of two limitations of CAR-T cells. First, autologous CAR-T products must be generated from T-cells isolated by leukapheresis, and using cells from a patient as starting material may risk generating CAR-T product from cancerous T-cells which could result in secondary malignancy. Second, since CD5 is expressed on normal, activated T-cells, CAR-T products, whether autologous or allogeneic, may need to be engineered to avoid fratricide of CAR-T cells against other CAR-T cells.

Manufacturing Capabilities and Industrialization of NK Cell Therapy

We have a manufacturing-first approach, referencing the fact that even before we were founded, our strategic partner GC Cell had already invested years pioneering the manufacturing process that we use today. Unlike most other companies in the NK field who started clinical development before establishing a scalable manufacturing process, we started clinical development with a mature and robust process in place. Our process is designed to allow us to produce off-the-shelf, allogeneic NK cell therapy candidates at scale, with the mission to make these therapies broadly accessible for patients with devastating autoimmune diseases and cancers. We leveraged our deep expertise in NK cell biology to establish an end-to-end proprietary process in collaboration with our strategic partner, GC Cell.

We believe the following features of our platform provide multiple key advantages:

Cord Blood as the Donor Source of our NK Cell Product Candidates

Cord blood is a recognized source of healthy donor cells for hematopoietic stem cell transplants and is readily available from multiple public banks in the United States and Europe. NK cells make up 5% to 15% of peripheral blood lymphocytes. Traditionally, peripheral blood has been used as the source for NK cells for therapeutic use. However, studies conducted by GC Cell have shown that NK cells derived from cord blood have a nearly ten-fold greater potential for expansion in our proprietary culture systems than those derived from peripheral blood, without premature exhaustion. The expression of receptors of interest on the surface of NK cells, such as those involved in the activation of NK cells on engagement of tumor cells, was seen to be more consistent donor-to-donor for cord blood NKs than peripheral-blood NK cells. Our manufacturing process activates the NK cells in cord blood in a donor-independent manner, resulting in a highly scaled, active and consistent NK cell product.

Selection of Optimal Genetic Characteristics in the Donor Cord Blood Units

We pre-screen banked cord blood units for both the KIR-B haplotype and high-affinity variant of the CD16 receptor which are drivers of NK cell activity:

- **KIR-B haplotype selection:** We base our product candidates on cord blood units encoding KIR-B alleles of the KIR receptor family. It has been reported that KIR-B haplotype NK cells have more activating receptors than KIR-A. It has also been reported that acute myeloid leukemia patients receiving allogeneic transplants from homozygous KIR-B donors have significantly decreased relapse rates and increased disease-free survival than those receiving transplants from KIR-A donors.
- **High-Affinity CD16 158V/V selection:** We select cord blood units that have a variant of CD16 known as 158 V/V, which has been shown to lead to increased ADCC activity. In a clinical trial of rituximab, an anti-CD20 mAb, follicular lymphoma patients with the CD16 genotype encoding the 158 V/V allele had a significantly higher response rate compared to those with other CD16 genotypes.

Approximately 15% of cord blood units have the characteristics above. Following pre-selection, we ship the cord blood units to our manufacturing facility where they are held in cryostorage. We believe that the availability, quality, ability to prescreen and ease of logistics of cord blood make it the optimal donor cell source for our proprietary manufacturing process.

Established and Highly Scaled Proprietary Manufacturing Process

We are leveraging a manufacturing process designed to be cGMP-compliant and potentially optimized for highly scaled expansion of the NK cells from a cord blood unit using a proprietary culture system. The NK cells from selected cord blood units are expanded using a proprietary engineered feeder (eFeeder) cell culturing process. The eFeeder cells are engineered to express a combination of factors on their surface, which enhance the activation and expansion of NK cells from the cord blood unit. The eFeeder cells are manufactured in-house, irradiated and do not persist in the final product. This process has been developed to produce large numbers of mature and highly active NK and CAR-NK cells while avoiding overstimulation, which has been shown to lead to cellular senescence.

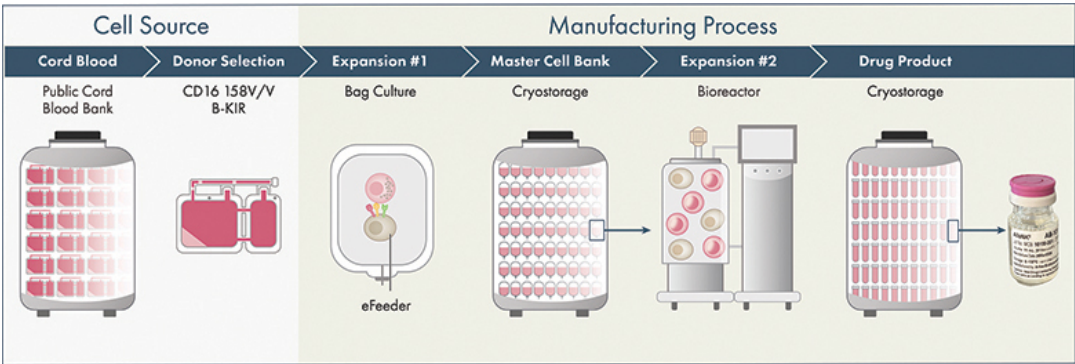
The NK cell expansion process consists of the following steps:

- **MCB production:** The cord blood unit is thawed and depleted of T-cells before culturing with the eFeeder cells, resulting in a significant expansion and enrichment of NK cells. For CAR-NK product candidates, a lentivirus vector encoding the specific CAR construct and IL-15 can be introduced at this stage. This results in the generation of cryopreserved MCB which is then stored in vials. MCB samples are assessed for quality

against qualified release specifications before use in the second expansion stage. For AlloNK, we routinely produce 50-80 vials of MCB from each cord blood unit. We have produced multiple MCBs from different donor cord blood units for each product candidate.

- **Drug product production:** A single vial of MCB is used to seed a second expansion step. This takes place in a 50-liter, single-use bioreactor and results in highly activate, pure NK cells. The NK cells are harvested, vialled and cryopreserved. For AlloNK, we routinely produce >80 vials of one billion NK cells per vial for clinical use from each drug product batch. We have multiple bioreactors installed at both our San Diego facility and GC Cell and have capacity to produce up to 100 batches per year across both sites. Samples of drug product from each batch are tested using qualified assays prior to release for clinical use.
- **Product characterization:** Our highly scaled and reproducible process for generating cord blood-derived NK and CAR-NK cells has yielded drug product that has consistently been observed to meet release specifications across manufacturing runs. For AlloNK, we and GC Cell have produced over 35 batches of drug product which passed all of our release criteria including criteria for purity, identity and functional activity.
- **Effective cryopreservation:** The effective long-term storage of cells while retaining product viability and potency is an essential step in providing off-the-shelf NK and CAR-NK cell therapies. The final step in the manufacturing process is cryopreservation. We believe that the ability to effectively cryopreserve our NK and CAR-NK cell therapy product candidates is a key differentiator for our platform and is essential to providing off-the-shelf products that can be shipped around the world and be available on demand for single or repeat patient dosing. Historically, NK cells have been reported to be highly sensitive to the stresses of a freeze-thaw cycle, and cryopreservation of NK cells has therefore been more challenging than T-cells. Our proprietary cryopreservation process uses methods that have consistently demonstrated >90% viability of our NK cells upon thawing, with no significant differences in NK cell activity or expression of cytokines, such as interferon- γ and TNF α .

For AlloNK, at the current scale, each cord blood unit is expanded to yield 50 to 80 cryopreserved MCB units. In turn, each MCB unit is further expanded to yield 80 to 100+ one billion-cell drug product vials. The demonstrated expansion from a single cord blood unit is therefore over 4,000 one billion-cell vials which are enough to treat over 600 autoimmune patients assuming two billion AlloNK cells per dose and three doses for a treatment regimen of an aggregate of six billion AlloNK cells total per patient with autoimmune disease. To date, we and GC Cell have produced over 35 clinical batches of AlloNK, producing thousands of AlloNK vials at one billion cells per vial, and have performed release testing on drug product derived from eight different donors. We have demonstrated both batch-to-batch and donor-to-donor consistency.



Our Manufacturing Process Can Generate Thousands of Doses of AlloNK from a Single Cord Blood Unit

We are conducting an ongoing product stability study to assess the shelf-life of our NK cell product candidates. We have tested each batch of AlloNK for cell viability, identity, purity, sterility and potency. To date, we have demonstrated stable results beyond 36 months. Our cryopreservation process was designed using an infusion-ready media not only to ensure that the thawed cells retain high and consistent activity, but also to enable a simple thawing process in which the drug product does not require any further processing before administration.

[Table of Contents](#)

Our Facility

In addition to the research and manufacturing capabilities at GC Cell's headquarters in Korea, we have established full development and manufacturing facilities in San Diego, California. We have built a new 52,000-square-foot corporate headquarters, which includes research and process development laboratories, and have recruited a team of cell therapy experts driving discovery research, preclinical development, translational science, process and analytical development, and cell therapy manufacturing. Our headquarters also includes a 9,000 square-foot purpose-built cGMP manufacturing center to support NK and CAR-NK cell production for our pipeline development and clinical trial supply. This new facility capacity is in addition to on-going manufacturing in Korea.

Our scaled manufacturing process established at GC Cell over more than ten years has enabled us to design an efficient layout for our San Diego manufacturing center that is cGMP compliant. Our facility comprises multiple production suites, a MCB / virus suite and a suite devoted to product fill-finish and cryopreservation. Each of the three 50L bioreactor suites dedicated to drug product production have the capacity to run 20 batches per year. Given drug product batches can yield 100 AlloNK vials with one billion NK cells each, our facility has the capacity to generate over 6,000 one billion NK cell vials per year, which assuming treatment regimen of two billion AlloNK cells per dose and three doses for an aggregate of six billion AlloNK cells total per patient with autoimmune disease, could provide sufficient drug product to treat 1,000 patients per year.

Released finished product is stored off site at a third-party logistics vendor, as is currently the case for drug products manufactured for us by GC Cell. We intend to use our facility to enable new pipeline program research, development and manufacturing, to further optimize the AlloNK manufacturing process and produce AlloNK for current and future clinical trials and to supply any potential commercial launch.

Competition

The biopharmaceutical industry in general, and the cell therapy field in particular, is characterized by rapidly advancing and changing technologies, intense competition and a strong emphasis on intellectual property. We face substantial and increasing competition from large and specialty biopharmaceutical companies, as well as public and private medical research institutions and governmental agencies. Competitors may compete with us in hiring scientific and management personnel, establishing clinical study sites, recruiting patients to participate in clinical trials and acquiring technologies complementary to, or necessary for, our programs.

Our known biopharmaceutical competitors in the cell therapy space that are developing allogeneic CAR-NK or CAR-T cell therapies include, but may not be limited to, the following: Adicet Bio, Inc., Autolus Therapeutics plc, Cabaletta Bio, Inc., Caribou Biosciences, Inc., Cartesian Therapeutics, Inc., Century Therapeutics, Inc., Fate Therapeutics, Inc., Galapagos NV, Gracell Biopharmaceuticals, Inc. (acquired by AstraZeneca), ImmPACT Bio USA, Inc., Juno Therapeutics, Inc. (acquired by BMS), Kite Pharma (acquired by Gilead), Kyverna Therapeutics, Inc., Nkarta, Inc., Novartis AG, Sana Biotechnology, Inc., Shoreline Biosciences Inc., Takeda Pharmaceuticals Company Limited and Wugen, Inc.

Many of our current or potential competitors have significantly greater financial, technical and human resources, as well as more expertise in research and development, manufacturing, preclinical testing, conducting clinical studies and trials and commercializing and marketing approved products, than us. Mergers and acquisitions in the biopharmaceutical industry may result in even greater resource concentration among a smaller number of competitors. Smaller or early-stage companies may also prove to be significant competitors, either alone or through collaborative arrangements with large and established companies.

Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA or other comparable foreign regulatory authority approval for their products more rapidly than us, which could result in our competitors establishing a strong market position before we are able to enter the market. Key competitive factors affecting the success of all of our programs are likely to be their efficacy, safety, convenience, price and degree of reimbursement.

Certain Competitor Data

There are three currently approved CAR T-cell therapies for the treatment of relapsed or refractory DLBCL:

Axicabtagene ciloleucel (YESCARTA)

In a Phase 2 clinical trial of ZUMA-1, a single-arm, multi-center, registrational trial, YESCARTA was administered to 108 patients with relapsed/refractory large B-cell lymphoma. After 11.6 months of follow-up, the ORR and CR rate

[Table of Contents](#)

were 72% and 51%, respectively. After two years of follow-up, the ORR, CR rate and progression-free survival (PFS) were 83%, 54% and 39%, respectively, as compared to after five years of follow-up, where the ORR, CR rate and PFS were 83%, 58% and 32%, respectively. After five years of follow-up, any grade CRS and ICANS occurred in 94% and 64%, respectively, and Grade 3 or higher CRS and ICANS occurred in 13% and 30% of patients, respectively. In this clinical trial, as per the protocol, all patients were hospitalized for YESCARTA infusion and for a minimum of 7 days afterward. The U.S. Prescribing Information for YESCARTA indicates that patients should be monitored at least daily for seven days at the certified healthcare facility following treatment for signs and symptoms of CRS and neurologic toxicities.

Lisocabtagene maraleucel (BREYANZI)

In the pivotal TRANSCEND NHL 001 clinical trial, BREYANZI was administered to 192 adult patients with relapsed or refractory large B-cell non-Hodgkin lymphoma after at least two lines of therapy. Any grade CRS and ICANS occurred in 46% and 35%, respectively, and Grade 3 or higher CRS and ICANS occurred in 2% and 10% of patients, respectively. After 18.8 months of follow-up, the ORR and CR rate were 73% and 54%, respectively. After two years of follow-up, the ORR, CR rate and PFS were 73%, 53% and 41%, respectively. The U.S. Prescribing Information for BREYANZI indicates that patients should be monitored daily for at least seven days following treatment at a risk evaluation and mitigation strategy (REMS)-certified healthcare facility for signs and symptoms of CRS and neurologic toxicities.

In an analysis of 130 patients with relapsed or refractory indolent non-Hodgkin lymphoma treated with BREYANZI in the Phase 2 TRANSCEND FL clinical trial, presented by Morschhauser *et al.* at the International Conference on Malignant Lymphoma in 2023, any grade CRS occurred in 58% of patients (42% Grade 1, 15% Grade 2, and 1% Grade 3).

JULIET - tisagenlecleucel (KYMRIA)

In a global Phase 2 trial of JULIET, an open-label, multi-center, single-arm trial, KYMRIA was administered to 115 patients with relapsed or refractory DLBCL, who received two or more prior lines of therapy. At 19 months of follow up, the ORR and CR rate were 54% and 40%, respectively. Any grade CRS and ICANS occurred in 74% and 58%, respectively, and Grade 3 or higher CRS and ICANS occurred in 23% and 18% of patients, respectively.

There are currently other auto-CAR T therapies being explored in autoimmune diseases for which initial data has been presented:

- In a 2024 publication by Muller *et al.* in the New England Journal of Medicine, data was reported on 15 patients with autoimmune disease (8 with SLE, 3 with idiopathic inflammatory myositis, and 4 with SSc). Any grade CRS and ICANS occurred in 11 patients (73%) and 1 patient (7%), respectively. Tocilizumab was used in 6 patients (40%). In this clinical trial, all patients were hospitalized for auto-CAR-T infusion and for a minimum of 10 days afterward. Follow-up of up to 29 months showed that disease activity remained absent in all eight SLE patients. The therapy was also observed to be effective in idiopathic inflammatory myositis, where all three patients treated had an American College of Rheumatology–European League against Rheumatism major clinical response and normalization of creatine kinase levels after three months and maintained these responses for up to 12 months; and in systemic sclerosis, where all four patients treated showed reduced severity of skin and lung disease for up to three months (and for up to six months in three patients that continued follow-up).
- Kyverna Therapeutics, Inc. presented data in June 2024 on 30 patients with autoimmune disease treated with KYV-101 from company-sponsored trials and investigator-reported named patient experiences. Any grade CRS and ICANS occurred in 25 patients (83%) and three patients (10%), respectively. Initial activity data was reported on seven patients with LN, showing reduction in anti-dsDNA autoantibodies, normalization of complement C3 and C4, and overall improvement in clinical disease activity. Additional data has also been reported on two patients with myasthenia gravis and two patients with MS.

In addition, several other modalities that are being pursued in autoimmune disease, such as allogenic CAR-T and T-cell engaging bispecific antibodies, have shown varying degrees of peripheral B-cell depletion in patients with B-

[Table of Contents](#)

NHL. Recent data from T-cell engaging bispecific antibodies in autoimmune diseases, such as RA and systemic sclerosis show peripheral B-cell depletion, which we believe serves as additional proof of mechanism that B-cell depletion has the potential to translate into activity in these patients Specifically:

- In a 2024 publication by Subklewe et al. in the European Journal of Cancer, data was reported on one patient with systemic sclerosis treated with blinatumomab. Blinatumomab was administered as a continuous intravenous infusion for five days each treatment cycle. Deep B-cell depletion was observed but B-cell levels began rebounding after each treatment cycle. No CRS or ICANS was reported.
- In a 2024 publication by Bucci et al. in Nature Medicine, data was reported on six patients with multidrug-resistant RA treated with blinatumomab. Treatment led to a rapid decline in RA clinical disease activity in all patients, improved synovitis in ultrasound and fibroblast activation protein PET-CT and reduced autoantibodies. Five of six patients were given abatacept after blinatumomab therapy. No CRS or ICANS was reported.

There are three currently approved bispecific antibodies for the treatment of B-NHL:

Glofitamab (COLUMVI)

The efficacy of glofitamab was evaluated in study NP30179, an open-label, multicenter, multicohort, single-arm clinical trial that included patients with relapsed or refractory LBCL after two or more lines of systemic therapy. The ORR and CR rate were 56% and 43%, respectively. Among 145 patients who received glofitamab, any-grade CRS occurred in 70% of patients (52% Grade 1, 14% Grade 2, 2.8% Grade 3, and 1.4% Grade 4). The U.S. Prescribing Information for COLUMVI indicates that, due to the risk of CRS, patients should be hospitalized during and for 24 hours after completion of infusion of step-up dose 1 (2.5 mg on Cycle 1 Day 8); patients who experienced any grade CRS during step-up dose 1 should be hospitalized during and for 24 hours after completion of step-up dose 2 (10 mg on Cycle 1 Day 15); and for subsequent doses, patients who experienced Grade ≥ 2 CRS with their previous infusion should be hospitalized during and for 24 hours after the completion of the next COLUMVI infusion.

Epcoritamab (EPKINLY)

The efficacy of epcoritamab was evaluated in EPCORE NHL-1, an open-label, multi-cohort, multicenter, single-arm trial in 157 patients with relapsed or refractory large B-cell lymphoma (LBCL) after two or more lines of systemic therapy. The ORR and CR rate were 61% and 38%, respectively. CRS occurred in 51% of patients receiving epcoritamab at the recommended dose in the clinical trial, with Grade 1 CRS occurring in 37%, Grade 2 in 17%, and Grade 3 in 2.5% of patients. ICANS occurred in 6% (10/157) of patients receiving epcoritamab at the recommended dose in the clinical trial, with Grade 1 ICANS in 4.5% and Grade 2 ICANS in 1.3% of patients. There was one (0.6%) fatal ICANS occurrence. The U.S. Prescribing Information for EPKINLY indicates that, due to the risk of CRS and ICANS, patients should be hospitalized for 24 hours after administration of the Cycle 1 Day 15 dosage of 48 mg.

Mosunetuzumab (LUNSUMIO)

The efficacy of LUNSUMIO was evaluated in an open-label, multicenter, multi-cohort study in patients with relapsed or refractory follicular lymphoma (FL) who had received at least two prior therapies, including an anti-CD20 monoclonal antibody and an alkylating agent. The ORR and CR rate were 80% and 60%, respectively. CRS occurred in 39% of patients who received mosunetuzumab at the recommended dose in the clinical trial, with Grade 1 CRS occurring in 28%, Grade 2 in 15%, Grade 3 in 2%, and Grade 4 in 0.5% of patients. Neurologic toxicity occurred in 39% of patients who received mosunetuzumab at the recommended dose in the clinical trial, with Grade 3 neurologic toxicity occurring in 3% of patients. ICANS was reported in 1% of patients (Grade 1: 0.5%, Grade 2: 0.5%) who received LUNSUMIO at the recommended dose in the study.

Intellectual Property

Intellectual property is of vital importance in our field and in biotechnology generally. Our commercial success depends in part on our ability to obtain intellectual property that protects our product candidates and combinations of our product candidates with other therapeutics. We seek to protect and enhance proprietary technology, inventions

[Table of Contents](#)

and improvements that are commercially important to the development of our business by seeking, maintaining and defending U.S. and foreign patent rights, whether developed internally or licensed from third parties.

We are actively building our intellectual property portfolio around our product candidates and our discovery programs, based on our own intellectual property and licensed intellectual property. One important step in building our current portfolio was executing the Core Agreement, described below, with GC Cell. The Core Agreement grants us an exclusive, royalty-bearing license, with the right to sublicense through multiple tiers, to certain intellectual property and technology owned or controlled by GC Cell relating to non-genetically modified and genetically modified NK cells, and culturing, engineering, and manufacturing thereof, to research, develop, manufacture, and commercialize NK cell pharmaceutical products in the Artiva Territory, which is anywhere in the world except for Asia, Australia and New Zealand. Applications to date have been filed in the United States, Europe, Canada and Israel. Further, we intend to file patent applications relating to new technologies we develop, either ourselves or with our strategic partners. We also intend to continue to identify and license patents that provide protection and serve as an optimal platform to enhance our intellectual property and technology base.

Our current intellectual property estate is designed to provide multiple layers of protection, including (1) patent rights directed to innovative manufacturing processes and methods for generating therapeutic NK cells; (2) patent rights covering constructs for use in our CAR-NK candidates; and (3) patent rights covering methods of treatment for therapeutic indications using NK cells.

Our current patent portfolio as of May 31, 2024, includes six patent families licensed from GC Cell that primarily relate to innovative manufacturing processes and methods for generating therapeutic NK cells. These families disclose compositions and methods used in NK cell manufacturing processes, as well as resulting products and therapeutic compositions, along with methods of treating cancer using these products and therapeutic compositions. Our current patent estate as of May 31, 2024, includes three patent families licensed from GC Cell, three patent families we co-own with GC Cell, and one patent family that we own covering constructs for use in our CAR-NK programs. Two of the families we license from GC Cell relate to particular CAR components. The first of these includes pending applications in the United States, Europe, and Canada, and any patents that issue from these pending applications are expected to expire in 2037, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees; the second of these includes a pending application in the United States, and any patents that issue from this pending application are expected to expire in 2042, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The second family we license from GC Cell relates to a novel anti-HER2 antibody or antigen-binding fragment and includes two issued U.S. patents and pending applications in the United States, Europe, Canada, and Israel. The issued U.S. patents are expected to expire in 2038, and any patents that issue from the pending patent applications in these licensed families are expected to expire between 2038 and 2042, without accounting for potentially available patent term adjustments or extensions and assuming payment of appropriate maintenance, renewal, annuity or other fees. Two of the families we co-own with GC Cell relate to cells and constructs encoding IL-15 and a CAR utilizing the novel anti-HER2 antigen binding fragment we license from GC Cell and methods of treatment using these cells and constructs. The first of these families includes pending applications in the United States, Europe, Israel, and Canada, and any patents that issue from these pending applications are expected to expire in 2042, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees; the second of these families includes a pending application in the United States, and any patents that issue from this pending application are expected to expire in 2043, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The third family we co-own with GC Cell relates to our anti-CD19 CAR-NK cell products and includes pending applications in the United States and Europe; any patents that issue from these pending applications are expected to expire in 2042, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The patent family that we own relates to a novel antibody or antigen binding fragment and includes a pending PCT application. Although no patents have yet issued from this owned patent family, we expect the term of any patents that may issue from the pending patent applications in this family to extend to at least 2043, without accounting for potentially available patent term adjustments or extensions and assuming payment of appropriate maintenance, renewal, annuity or other governmental fees.

[Table of Contents](#)

Our current patent estate as of May 31, 2024, includes eleven patent families related to NK cells and to methods of treatment using NK cells in addition to a therapeutic antibody. The first family, which is co-owned by GC Cell and Incyte Corporation, relates to pharmaceutical combinations for treating tumors comprised of anti-CD19 antibody and NK cells. This family includes pending applications in Canada, Europe, Israel, the United States, Eurasia, Mexico, Ukraine, and South Africa; any patents that issue from these pending applications are expected to expire in 2039, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The second family, which we co-own with GC Cell, relates to the treatment of cancer with NK cells and a CD20 targeted antibody. This family includes pending applications in the United States and Europe; any patents that issue from these pending applications are expected to expire in 2041, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The third family, which we own, relates to the treatment of autoimmune indications with NK cells and therapeutic antibodies and includes a pending PCT application; any patents that issue from these pending applications are expected to expire in 2044, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The fourth and fifth families, which we own, relate to methods of treatment using NK cells in combination with other therapeutics. The fourth family includes a pending U.S. provisional application; any patents that issue from applications that claim priority to this provisional application are expected to expire in 2044, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The fifth family includes a pending PCT application; any patents that issue from this pending application are expected to expire in 2044, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The sixth family, which we own, relates to engineered NK cells and methods of treatment and includes a pending U.S. provisional application; any patents that issue from applications that claim priority to this provisional application are expected to expire in 2045, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The other five patent families, which we co-own with GC Cell, relate to NK cells and to additional combinations of NK cells and therapeutic antibodies directed to various targets. Of these, the first family includes pending applications in the United States, Europe, Canada, and Israel; any patents that issue from these pending applications are expected to expire in 2041, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees. The remaining families each include pending applications in the United States, Europe, Australia, China, Japan, and Korea; any patents that issue from these pending applications are expected to expire in 2042, without accounting for potentially available patent term adjustment or extensions, and assuming payment of appropriate maintenance, renewal, annuity, or other fees.

Our current patent estate as of May 31, 2024, also includes a patent family co-owned by us, Affimed GmbH and GC Cell related to therapeutic compositions and methods of treating cancer using NK cells in combination with one of Affimed's innate cell engagers. This family includes pending applications in the United States, Australia, Canada, China, Europe, Israel, India, Japan, and Korea. We expect the term of any patents that issue from the pending patent applications in this family to extend until at least 2042, without accounting for potentially available patent term adjustment or extension and assuming payment of appropriate maintenance, renewal, annuity or other governmental fees.

With respect to both licensed and company-owned intellectual property, we cannot be sure that patents will be granted with respect to any of our pending patent applications or with respect to any patent applications filed by us in the future, nor can we be sure that any of our existing patents or any patents that may be granted to us in the future will be commercially useful in protecting our commercial products and methods of manufacturing the same.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the date of filing of the first non-provisional application to which priority is claimed. In the United States, patent term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office (USPTO) in granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed patent. In the United States, the term of a patent that covers an FDA-approved drug may also be eligible for a patent term extension of up to five years under the Drug Price Competition and Patent Term Restoration Act of 1984 (the Hatch-Waxman Act), which is designed to compensate for the patent term lost during the FDA regulatory review.

process. The length of the patent term extension is calculated based on the length of time it takes for regulatory review. A patent term extension under the Hatch-Waxman Act cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Moreover, a patent can only be extended once, and thus, if a single patent is applicable to multiple products, it can only be extended based on one product. Similar provisions are available in Europe and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug. When possible, depending upon the length of clinical trials and other factors involved in the filing of a biologics license application (BLA), we expect to apply for patent term extensions for patents covering our product candidates and their methods of use.

In addition to patent protection, we also seek to rely on regulatory protection and exclusivities. For instance, we intend to rely on the 12-year period for marketing exclusivity in the United States, and similar marketing exclusivities in other countries, to prevent competitors from obtaining regulatory approval for our products.

We also rely on trademarks, trade secrets, know-how, continuing technological innovation, confidentiality agreements, and invention assignment agreements to develop and maintain our proprietary position. The confidentiality agreements are designed to protect our proprietary information and the invention assignment agreements are designed to grant us ownership of technologies that are developed for us by our employees, consultants, or other third parties. We seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in our agreements and security measures, either may be breached, and we may not have adequate remedies. In addition, our trade secrets may otherwise become known or independently discovered by competitors.

Our commercial success also depends in part on our ability to operate without infringing on the proprietary rights of others and to prevent others from infringing our proprietary rights.

Collaboration and License Agreements

GC Cell and Related Agreements

We have entered into several agreements with GC Cell and related entities concerning our platform NK cell technology and manufacturing of our core products, as described below.

Option and License Agreement with GC Cell

In September 2019, we entered into an option and license agreement with GC Cell, as amended in June 2020 and February 2022 (Core Agreement). Under the Core Agreement, GC Cell granted us an exclusive, royalty-bearing license, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell relating to non-genetically modified and genetically modified NK cells, and culturing, engineering, manufacturing thereof, to research, develop, manufacture and commercialize NK cell pharmaceutical products in the Artiva Territory, which is anywhere in the world except for Asia, Australia, and New Zealand. GC Cell retained rights under the license to allow it and its affiliates to perform obligations under the Core Agreement and other agreements between us and them.

Under the Core Agreement, GC Cell agreed to conduct a discovery, research, preclinical development and manufacturing program under a plan approved by a JSC, to generate and identify product candidates for nomination as option candidates. GC Cell will bear all costs for its work under the R&D Plan, except that we will bear all costs for completing IND-enabling activities performed by GC Cell on behalf of us, other than certain efficacy studies.

For each product candidate determined by the JSC to be an option candidate, we have an exclusive option under the Core Agreement to obtain an exclusive, sublicensable license to research, develop, manufacture and commercialize such candidate in the Artiva Territory for any therapeutic, prophylactic or diagnostic uses in humans, on economic terms to be determined in good faith by the parties. GC Cell retains exclusive rights to the licensed technology in Asia, Australia and New Zealand, though we have the right to request, and GC Cell has agreed to consider in good faith, inclusion of Australia, New Zealand and/or specific countries in Asia in the Artiva Territory on a product-by-product basis. If we elect not to exercise the option with respect to a particular option candidate, GC Cell retains the right to continue development of such candidate. To-date, we have exercised our rights to license four option candidates, including AlloNK (AB-101), AB-201 and AB-205.

[Table of Contents](#)

We have control over and will bear the costs of the development, regulatory, manufacturing and commercialization activities relating to the option candidates for which we have exercised our option, each a licensed product. Accordingly, we have certain diligence obligations and must use commercially reasonable efforts to develop and seek regulatory approval for each licensed product in at least one indication in the United States and the EU, and following regulatory approval in a country, to commercialize such licensed product in at least one indication in such country. The Core Agreement provides that we have the right to engage GC Cell or its appropriate affiliate to provide research and manufacturing services for the licensed products being developed by us in the Artiva Territory under separately executed service agreements.

Under the Core Agreement, we are obligated to pay a low single-digit percentage royalty on net sales of any licensed products, the manufacture, use or sale of which is claimed by or uses any Core IP. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed product and continuing until the later of (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We also have the exclusive option to extend our license to the Core IP to be worldwide with respect to products originated from us in exchange for a specified increase in the applicable royalty. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property.

The Core Agreement will remain in effect until the expiration of the last-to-expire royalty payment obligations. The last to expire patents (or any patents that issue from pending applications) underlying the royalty payment obligations under the Core Agreement are currently expected to expire by 2042, without accounting for potentially available patent term extensions or adjustments. We have the right to terminate the Core Agreement for any reason upon 90 days' written notice. Either party may terminate the Core Agreement upon the other party's uncured material breach, bankruptcy or insolvency. Upon termination of the Core Agreement for any reason other than uncured material breach by GC Cell, we must (i) assign and transfer all regulatory materials and approvals relating to any licensed product to GC Cell, and (ii) grant GC Cell a right of reference and use to all pre-clinical and clinical data relating to any licensed product, except that both (i) and (ii) only apply to licensed products that were developed at least in part by GC Cell, or were developed by a third party, and are claimed by or use licensed GC Cell technology. If the Core Agreement is terminated by GC Cell due to an uncured material breach, bankruptcy or insolvency, sublicensees may receive a direct license from GC Cell.

AB-101 Selected Product License Agreement

In November 2019, we entered into a license agreement with GC Cell for our AB-101 product candidate, as amended in February 2022 (the AB-101 Agreement). AB-101 is the first product for which we exercised our option under the Core Agreement. Under the AB-101 Agreement, GC Cell granted us an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture and commercialize AB-101.

Under the AB-101 Agreement, we are obligated to pay tiered royalties in the low-mid to high single-digit percentage range on annual net sales of any licensed AB-101 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-101 product and continuing until the later of (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We are also obligated to make milestone payments to GC Cell of (i) up to \$22.0 million upon the first achievement of certain development milestones, and (ii) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-101 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property.

[Table of Contents](#)

The AB-101 Agreement will remain in effect until the expiration of the last-to-expire royalty payment obligations. The last to expire patents (or any patents that issue from pending applications) underlying the royalty payment obligations under the AB-101 Agreement for AB-101 are currently expected to expire by 2042, without accounting for potentially available patent term extensions or adjustments. We have the right to terminate the AB-101 Agreement for any reason upon 90 days' written notice. Either party may terminate the AB-101 Agreement upon the other party's uncured material breach, bankruptcy or insolvency. Upon termination of the AB-101 Agreement for any reason other than uncured material breach by GC Cell, we must (i) assign and transfer all regulatory materials and approvals relating to AB-101 to GC Cell, and (ii) grant GC Cell a right of reference and use to all pre-clinical and clinical data relating to AB-101.

AB-201 Selected Product License Agreement

In October 2020, we entered into a license agreement with GC Cell for our AB-201 product candidate, as amended in February 2022 and September 2023 (the AB-201 Agreement). AB-201 is the second product for which we exercised our option under the Core Agreement. Under the AB-201 Agreement, GC Cell granted us an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture and commercialize AB-201.

Under the AB-201 Agreement, we paid a one-time, upfront fee of \$0.3 million as reimbursement of certain costs previously incurred by GC Cell relating to AB-201. We are obligated to pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-201 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-201 product and continuing until the later of (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We are also obligated to make milestone payments to GC Cell of (i) up to \$25.0 million upon the first achievement of certain development milestones, and (ii) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-201 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. Further, in consideration of a grant-back license and right of reference to certain intellectual property rights and regulatory filings owned or controlled by us in the Artiva Territory for the exploitation of the AB-201 product outside the Artiva Territory, GC Cell is further obligated to pay us a low single-digit royalty on net sales outside the Artiva Territory of any licensed AB-201 product, as well as up to \$1.8 million upon the first achievement of certain development milestones.

The AB-201 Agreement will remain in effect until the expiration of the last-to-expire royalty payment obligations. The last to expire patents (or any patents that issue from pending applications) underlying the payment obligations under the AB-201 Agreement are currently expected to expire by 2043, without accounting for potentially available patent term extensions or adjustments. We have the right to terminate the AB-201 Agreement for any reason upon 90 days' written notice. Either party may terminate the AB-201 Agreement upon the other party's uncured material breach, bankruptcy or insolvency. On termination of the AB-201 Agreement for any reason other than uncured material breach by GC Cell, we must (i) assign and transfer all regulatory materials and approvals relating to AB-201 to GC Cell, and (ii) grant GC Cell a right of reference and use to all pre-clinical and clinical data relating to AB-201.

AB-205 Selected Product License Agreement

In December 2022, we entered into a license agreement with GC Cell for our AB-205 product candidate (the AB-205 Agreement). AB-205 is the fourth product for which we exercised our option under the Core Agreement. Under the AB-205 Agreement, GC Cell granted us an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture and commercialize AB-205.

Under the AB-205 Agreement, we paid to GC Cell a one-time, upfront payment of \$1.0 million, and we are obligated to make a payment of \$2.5 million to GC Cell after we notify GC Cell that we opt to proceed to clinical development with an AB-205 product. We are also obligated to pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-205 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first

[Table of Contents](#)

commercial sale of a licensed AB-205 product and continuing until the later of (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for such licensed product in such country; and (iii) the tenth anniversary of the first commercial sale of such licensed product in such country. We are also obligated to make milestone payments to GC Cell of (i) up to \$29.5 million upon the first achievement of certain development milestones, plus cost sharing of certain development costs incurred by GC Cell, and (ii) up to \$28.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-205 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property.

The AB-205 Agreement will remain in effect until the expiration of the last-to-expire royalty payment obligations. The last to expire patents (or any patents that issue from pending applications) underlying the royalty payment obligations under the AB-205 Agreement are currently expected to expire by 2043, without accounting for potentially available patent term extensions or adjustments. We have the right to terminate the AB-205 Agreement for any reason upon 90 days' written notice. Either party may terminate the AB-205 Agreement upon the other party's uncured material breach, bankruptcy or insolvency. Further, GC Cell may terminate the AB-205 Agreement if we do not elect to proceed with clinical development of the AB-205 Product after receipt of certain clinical data provided by GC Cell. Upon termination of the AB-205 Agreement for any reason other than uncured material breach by GC Cell, we must (i) assign and transfer all regulatory materials and approvals relating to AB-205 to GC Cell, and (ii) grant GC Cell a right of reference and use to all pre-clinical and clinical data relating to AB-205.

Research Services Agreement with GC Cell

As contemplated by the Core Agreement, in August 2020 we entered into the GC Cell Research Services Agreement, as amended in February 2022, under which GC Cell agreed to provide research services in support of the research and development of one or more of the products we have licensed from GC Cell. The GC Cell Research Services Agreement provides that the parties will agree to specific projects as work orders under the GC Cell Research Services Agreement. Each work order shall set forth, upon terms mutually agreeable to GC Cell and us, the specific services to be performed by GC Cell, the timeline and schedule for the performance of the services and the compensation to be paid by us to GC Cell for the provision of such services, as well as any other relevant terms and conditions. Unless otherwise agreed by the parties in a work order, GC Cell will own all intellectual property generated in the course of its provision of services under the Agreement, and all such intellectual property, to the extent related to or arising from the licensed technology under the Core Agreement and selected product license agreements, including the AB-101 Agreement and the AB-201 Agreement, will be included in the licenses granted to us thereunder.

The GC Cell Research Services Agreement terminates on the five-year anniversary of its execution, except that GC Cell is obligated to complete any work orders that remain open at the time the agreement terminates. Both parties have the right to terminate the GC Cell Research Services Agreement for any reason upon 90 days' written notice, though if GC Cell terminates the GC Cell Research Services Agreement without cause, then at our option the termination shall not be effective until the later of (a) the end of the 90-day notice period, or (b) the date on which the services provided under the open work order have been completed. Either party may terminate the GC Cell Research Services Agreement or any work order upon thirty (30) days' written notice in the event of an uncured material breach. Either party may also terminate the GC Cell Research Services Agreement immediately in writing if the other party or its affiliates breaches the requirement that no individuals debarred or disqualified under the U.S. Federal Food, Drug and Cosmetic Act, or comparable applicable laws, may perform the services or use the data and intellectual property hereunder.

Master Manufacturing Agreement with GC Cell

In March 2020, we entered into a Master Agreement for Manufacturing Services (the Manufacturing Agreement) with GC Cell, formerly GC Lab Cell Corporation, under which GC Cell agreed to manufacture specified products under individual work orders for use in our Phase 1 and Phase 2 clinical trials. Each work order will contain an estimated budget of service fees and out-of-pocket costs to be incurred in the performance of services under the agreement and the work order, as well as additional terms and conditions relating to the estimated budget. We will own all results and data generated by GC Cell under the Manufacturing Agreement. GC Cell may not subcontract its performance, even to affiliates, without our written consent.

[Table of Contents](#)

Under the Manufacturing Agreement, we granted GC Cell a limited non-exclusive, non-transferable, non-sublicensable, revocable, royalty-free license to our pre-existing intellectual property that is necessary and useful to manufacture products for us. Any intellectual property generated in the course of the manufacturing will be owned by us. GC Cell granted us a limited worldwide, royalty-free, fully paid, non-exclusive license, including the right to sublicense through multiple tiers, to GC Cell background technology and improvements thereof used to manufacture products under the agreement. These licenses survive termination of the Manufacturing Agreement.

The Manufacturing Agreement expires on the five-year anniversary of its execution, unless terminated earlier or extended by the parties in writing. Under the terms of the Manufacturing Agreement, as amended in July 2020, we have the right to terminate the Manufacturing Agreement at any time and for any reason upon six (6) months written notice. We also have the right to terminate any open work order at any time and for any reason upon sixty (60) days' written notice. Either party may terminate the Manufacturing Agreement or any work order upon thirty (30) days' written notice in the event of an uncured material breach. GC Cell may terminate any work order on sixty (60) days' prior written notice if GC Cell reasonably concludes that it is not technically or scientifically feasible to deliver the services contemplated by such work order despite applying its commercially reasonable efforts, but only if (i) such non-feasibility is not caused by GC Cell and is outside of GC Cell's reasonable control and (ii) the parties are unable to resolve such scientific or technical issues within a sixty (60) day period.

Collaboration Agreements

Affirmed Collaboration Agreement

In November 2022, we entered into a collaboration agreement (the Affirmed Collaboration Agreement) with Affirmed, as amended in November 2022 and June 2023. The collaboration is focused on the clinical development and commercialization of a combination therapy comprising (i) Affirmed's product acimtamig and (ii) our product AlloNK in the United States and certain other countries that we and Affirmed may agree to include, excluding specified Asia Pacific region countries (the Territory) for any and all uses in humans and animals, with an initial focus on the treatment of CD30+ Hodgkin Lymphoma and Peripheral T-Cell Lymphoma and other indications that may be included in a development plan.

Under the Affirmed Collaboration Agreement, we granted Affirmed, under certain intellectual property and technology owned or controlled by us relating to AlloNK, (a) an exclusive, non-transferable (except to affiliates and successors in interest), royalty-free and non-sublicensable (except to affiliates and subcontractors) license to use AlloNK to clinically develop the combination therapy in the Territory in accordance with a development plan, and (b) a non-exclusive, non-transferable (except to affiliates and successors in interest), royalty-free and non-sublicensable (with certain exceptions) license to promote the combination therapy in the Territory. Affirmed granted us a non-exclusive, royalty-free, non-transferable (except to affiliates and successors in interest) and non-sublicensable (except to affiliates and subcontractors) license under certain intellectual property and technology owned or controlled by Affirmed relating to acimtamig to use acimtamig to clinically develop the combination therapy in the Territory in accordance with a development plan. Affirmed will be primarily responsible for the development of the combination therapy, the conduct of the relevant clinical trials and the preparation and filing of regulatory materials during the clinical development. We will support Affirmed in the development, in particular through the supply of AlloNK and our IL-2 product to be used in the clinical trials. Affirmed will have the sole right and responsibility to promote the combination therapy according to a jointly aligned promotion plan.

During the term of the Affirmed Collaboration Agreement, and subject to certain exceptions, neither party nor its affiliates is permitted to clinically develop or commercialize any other product or therapy comprising its product (i.e., acimtamig for Affirmed and AlloNK for us) in the Territory, whether as a monotherapy or part of a combination therapy, for any indication which is included in the then applicable development plan and for which we and Affirmed have agreed to file an IND. In addition, during the term of Affirmed Collaboration Agreement, Affirmed may not clinically develop or commercialize any product or therapy comprising its acimtamig with other NK cells (except for indications which Affirmed has proposed and we have rejected to include in the development plan or rejected to file an IND), and we may not clinically develop or commercialize any product that directly and specifically binds to CD30 without any known off-target binding that is pre-clinically or clinically relevant in the Territory (except for indications which we have proposed and Affirmed has rejected to include in the development plan or rejected to file an IND).

Affirmed is responsible for all costs associated with the development of the combination therapy (including all clinical trial costs), except that we and Affirmed shall each bear 50% of the costs and expenses incurred in

[Table of Contents](#)

connection with the performance of any confirmatory clinical trial required by the FDA for the combination therapy. We are solely responsible for all costs incurred by us for the supply of AlloNK and our IL-2 product used in the combination therapy clinical trials and for the conduct of certain development activities assigned to us under the development plan. In addition, we and Affimed have agreed to make payments to each other to achieve a proportion of 67%/33% (Affimed/us) of revenues generated by both parties from commercial sales of each party's product as part of the combination therapy, with such payment obligations commencing on the first commercial sale of a combination product by us or Affimed and expiring on a country-by-country basis upon the earlier of (1) biosimilar market entry in such country and (2) the later of (x) the expiration of all collaboration patents in such country and (y) the expiration of regulatory data exclusivity of acimtamig or AlloNK in such country.

Unless earlier terminated, the Affimed Collaboration Agreement will expire when there are no remaining payment obligations by either party in the Territory. Either party may terminate the Affimed Collaboration Agreement in its entirety for any uncured material breach by the other party or upon the other party's insolvency, subject to certain notice and cure periods. In addition, Affimed may terminate the Affimed Collaboration Agreement if our ongoing clinical trial of AlloNK fails to meet certain specified success criteria set forth in the clinical trial protocol, subject to a certain notice and cure period.

We or Affimed may (during certain specified time windows during the clinical development phase) opt out of the further development and promotion of the combination therapy. If a party opts out, the other party may either terminate the Affimed Collaboration Agreement or elect to continue the development and promotion of the combination therapy, in which case the opting-out party is required to provide certain continued support activities (e.g., supply of its product), and the revenue ratio applicable to each party will be adjusted accordingly. In addition, if Affimed opts out and we elect to continue, we are required to pay Affimed a portion of its costs incurred before its opt-out, unless Affimed opts out after a change of control of Affimed.

Sales and Marketing

Given our stage of development, we have not yet established a commercial organization or distribution capabilities. We intend to build a commercial infrastructure to support sales of any of our approved products. We expect to manage sales, marketing and distribution through internal resources and third-party relationships. While we may commit significant financial and management resources to commercial activities, we will also consider collaborating with one or more pharmaceutical companies to enhance our commercial capabilities.

Government Regulation and Product Approval

As a biopharmaceutical company that operates in the United States, we are subject to extensive regulation. Our cell products will be regulated as biologics. With this classification, commercial production of our products will need to occur in registered facilities in compliance with cGMP for biologics. The FDA categorizes human cell- or tissue-based products as either minimally manipulated or more than minimally manipulated and has determined that more than minimally manipulated products require clinical trials to demonstrate product safety and efficacy and the submission of a BLA for marketing authorization. Our products are considered more than minimally manipulated and will require evaluation in clinical trials and the submission and approval of a BLA before we can market them.

Government authorities in the United States, at the federal, state and local levels, and in other countries extensively regulate, among other things, the research, development, testing, manufacturing, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of biopharmaceutical products such as those we are developing. Our product candidates must be approved by the FDA before they may be legally marketed in the United States and by the appropriate foreign regulatory authorities before they may be legally marketed in foreign countries. Generally, our activities in other countries will be subject to regulation that is similar in nature and scope as that imposed in the United States, although there can be important differences. Additionally, some significant aspects of regulation in the European Union (EU) are addressed in a centralized way, but country-specific regulation remains essential in many respects. The process for obtaining regulatory marketing approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

[Table of Contents](#)

U.S. Product Development Process

In the United States, the FDA regulates pharmaceutical and biological products under the Federal Food, Drug and Cosmetic Act (FDCA), the Public Health Service Act (PHSA) and their implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to administrative or judicial sanctions. FDA sanctions could include, among other actions, refusal to approve pending applications, withdrawal of an approval, a clinical hold, warning letters, product recalls or withdrawals from the market, product seizures, total or partial suspension of production or distribution injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties. Any agency or judicial enforcement action could have a material adverse effect on us. The process required by the FDA before a biological product may be marketed in the United States generally involves the following:

- completion of nonclinical laboratory tests and animal studies according to good laboratory practices (GLPs) and applicable requirements for the humane use of laboratory animals or other applicable regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- approval by an independent Institutional Review Board (IRB) or ethics committee at each clinical site before the trial is commenced;
- performance of adequate and well-controlled human clinical trials according to the FDA's regulations commonly referred to as good clinical practices (GCPs), and any additional requirements for the protection of human research patients and their health information, to establish the safety and efficacy of the proposed biological product for its intended use;
- submission to the FDA of a BLA for marketing approval that includes substantial evidence of safety, purity and potency from results of nonclinical testing and clinical trials;
- satisfactory completion of an FDA Advisory Committee review, if applicable;
- satisfactory completion of an FDA inspection of the manufacturing facility or facilities where the biological product is produced to assess compliance with cGMP, to assure that the facilities, methods and controls are adequate to preserve the biological product's identity, strength, quality and purity and, if applicable, the FDA's current good tissue practices (GTPs), for the use of human cellular and tissue products;
- potential FDA audit of the nonclinical study and clinical trial sites that generated the data in support of the BLA; and
- FDA review and approval, or licensure, of the BLA.

Before testing any biological product candidate, including our product candidates, in humans, the product candidate enters the preclinical testing stage. Preclinical tests, also referred to as nonclinical studies, include laboratory evaluations of product chemistry, toxicity and formulation, as well as animal studies to assess the potential safety and activity of the product candidate. The conduct of the preclinical tests must comply with federal regulations and requirements including GLPs. The clinical trial sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and a proposed clinical protocol, to the FDA as part of the IND. Some preclinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA raises concerns or questions regarding the proposed clinical trials and places the trial on a clinical hold within that 30-day time period. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. The FDA may also impose clinical holds on a biological product candidate at any time before or during clinical trials due to safety concerns or non-compliance. If the FDA imposes a clinical hold, trials may not recommence without FDA authorization and then only under terms authorized by the FDA. Accordingly, we cannot be sure that submission of an IND will result in the FDA allowing clinical trials to begin, or that, once begun, issues will not arise that suspend or terminate such trials.

Clinical trials involve the administration of the biological product candidate to patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria and the parameters to be used to monitor subject safety, including stopping

[Table of Contents](#)

rules that assure a clinical trial will be stopped if certain adverse events should occur. Each protocol and any amendments to the protocol must be submitted to the FDA as part of the IND. Clinical trials must be conducted and monitored in accordance with the FDA's regulations comprising the GCP requirements, including the requirement that all research patients provide informed consent. Further, each clinical trial must be reviewed and approved by an independent IRB at or servicing each institution at which the clinical trial will be conducted. An IRB is charged with protecting the welfare and rights of trial participants and considers such items as whether the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the form and content of the informed consent that must be signed by each clinical trial subject or his or her legal representative and must monitor the clinical trial until completed. Certain clinical trials involving human gene transfer research also must be overseen by an Institutional Biosafety Committee, a standing committee established specifically to provide peer review of the safety of research plans, procedures, personnel training and environmental risks of work involving recombinant DNA molecules. IBCs are typically assigned certain review responsibilities relating to the use of recombinant DNA molecules, including reviewing potential environmental risks, assessing containment levels, and evaluating the adequacy of facilities, personnel training and compliance with the NIH Guidelines. Some studies also include oversight by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board, which provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study and may halt the clinical trial if it determines that there is an unacceptable safety risk for subjects or other grounds, such as no demonstration of efficacy.

There are also requirements governing the reporting of ongoing clinical studies and clinical study results to public registries.

Human clinical trials are typically conducted in three sequential phases that may overlap or be combined:

- Phase 1. The biological product is initially introduced into healthy human subjects and tested for safety. In the case of some products for severe or life-threatening diseases, especially when the product may be too inherently toxic to ethically administer to healthy volunteers, the initial human testing is often conducted in patients.
- Phase 2. The biological product is evaluated in a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance, optimal dosage and dosing schedule.
- Phase 3. Clinical trials are undertaken to further evaluate dosage, clinical efficacy, potency and safety in an expanded patient population at geographically dispersed clinical trial sites. These clinical trials are intended to establish the overall risk to benefit ratio of the product and provide an adequate basis for product labeling.

Post-approval clinical trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These clinical trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication, particularly for long-term safety follow-up. During all phases of clinical development, regulatory authorities require extensive monitoring and auditing of all clinical activities, clinical data and clinical trial investigators. Annual progress reports detailing the results of the clinical trials must be submitted to the FDA. Written IND safety reports must be promptly submitted to the FDA, and the investigators for serious and unexpected adverse events, any findings from other studies, tests in laboratory animals or in vitro testing that suggest a significant risk for human patients, or any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information. Phase 1, Phase 2 and Phase 3 clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor or its data safety monitoring board may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research patients are being exposed to an unacceptable health risk, including risks inferred from other unrelated immunotherapy trials. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the biological product has been associated with unexpected serious harm to patients.

[Table of Contents](#)

Human immunotherapy products are a new category of therapeutics. Because this is a relatively new and expanding area of novel therapeutic interventions, there can be no assurance as to the length of the trial period, the number of patients the FDA will require to be enrolled in the trials in order to establish the safety, efficacy, purity and potency of immunotherapy products, or that the data generated in these trials will be acceptable to the FDA to support marketing approval.

Concurrently with clinical trials, companies usually complete additional studies and must also develop additional information about the physical characteristics of the biological product as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. To help reduce the risk of the introduction of adventitious agents with use of biological products, the PHSA emphasizes the importance of manufacturing control for products whose attributes cannot be precisely defined. The manufacturing process must be capable of consistently producing quality batches of the product candidate and, among other things, the sponsor must develop methods for testing the identity, strength, quality, potency and purity of the final biological product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the biological product candidate does not undergo unacceptable deterioration over its shelf life.

U.S. Review and Approval Processes

After the completion of clinical trials of a biological product, FDA approval of a BLA must be obtained before commercial marketing of the biological product. The BLA submission must include results of product development, laboratory and animal studies, human trials, information on the manufacture and composition of the product, proposed labeling and other relevant information. The testing and approval processes require substantial time and effort and there can be no assurance that the FDA will accept the BLA for filing and, even if filed, that any approval will be granted on a timely basis, if at all.

Under the Prescription Drug User Fee Act (PDUFA), as amended, each BLA must be accompanied by a significant user fee. The FDA adjusts the PDUFA user fees on an annual basis. PDUFA also imposes an annual program fee for biological products. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

Within 60 days following submission of the application, the FDA reviews a BLA submitted to determine if it is substantially complete before the agency accepts it for filing. The FDA may refuse to file any BLA that it deems incomplete or not properly reviewable at the time of submission and may request additional information. In this event, the BLA must be resubmitted with the additional information. The resubmitted application also is subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review of the BLA. The FDA reviews the BLA to determine, among other things, whether the proposed product is safe, potent, and/or effective for its intended use, and has an acceptable purity profile, and whether the product is being manufactured in accordance with cGMP to assure and preserve the product's identity, safety, strength, quality, potency and purity. The FDA may refer applications for novel biological products or biological products that present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions. During the biological product approval process, the FDA also will determine whether a Risk Evaluation and Mitigation Strategy (REMS), is necessary to assure the safe use of the biological product. A REMS is a safety strategy to manage a known or potential serious risk associated with a medicine and to enable patients to have continued access to such medicines by managing their safe use, and could include medication guides, physician communication plans, or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. If the FDA concludes a REMS is needed, the sponsor of the BLA must submit a proposed REMS. The FDA will not approve a BLA without a REMS, if required. Before approving a BLA, the FDA will inspect the facilities at which the product is manufactured. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. For immunotherapy products, the FDA also will not approve the product if the manufacturer is not in compliance with the GTPs, to the extent applicable. These are FDA regulations and guidance documents that govern the methods used in, and the facilities and controls used for, the manufacture of human

[Table of Contents](#)

cells, tissue and cellular and tissue based products (HCT/Ps), which are human cells or tissue intended for implantation, transplant, infusion, or transfer into a human recipient. The primary intent of the GTP requirements is to ensure that cell and tissue-based products are manufactured in a manner designed to prevent the introduction, transmission and spread of communicable disease. FDA regulations also require tissue establishments to register and list their HCT/Ps with the FDA and, when applicable, to evaluate donors through screening and testing. Additionally, before approving a BLA, the FDA will typically inspect one or more clinical sites to assure that the clinical trials were conducted in compliance with IND trial requirements and GCP requirements. To assure cGMP, GTP and GCP compliance, an applicant must incur significant expenditure of time, money and effort in the areas of training, record keeping, production and quality control.

Notwithstanding the submission of relevant data and information, the FDA may ultimately decide that the BLA does not satisfy its regulatory criteria for approval and deny approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data. If the agency decides not to approve the BLA in its present form, the FDA will issue a complete response letter that describes all of the specific deficiencies in the BLA identified by the FDA. The deficiencies identified may be minor, for example, requiring labeling changes, or major, for example, requiring additional clinical trials. Additionally, the complete response letter may include recommended actions that the applicant might take to place the application in a condition for approval. If a complete response letter is issued, the applicant may either resubmit the BLA, addressing all of the deficiencies identified in the letter, or withdraw the application.

If a product receives regulatory approval, the approval may be limited to specific diseases and dosages or the indications for use may otherwise be limited, which could restrict the commercial value of the product. Further, the FDA may require that certain contraindications, warnings or precautions be included in the product labeling. The FDA may impose restrictions and conditions on product distribution, prescribing, or dispensing in the form of a risk management plan, or otherwise limit the scope of any approval. In addition, the FDA may require post marketing clinical trials, sometimes referred to as Phase 4 clinical trials, designed to further assess a biological product's safety and effectiveness, and testing and surveillance programs to monitor the safety of approved products that have been commercialized.

In addition, under the Pediatric Research Equity Act (PREA), as amended, a BLA or supplement to a BLA must contain data to assess the safety and effectiveness of the product for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDCA requires that a sponsor of a biological product or drug that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit a pediatric study plan to the FDA not later than 60 days after the end-of-Phase 2 meeting or as may be agreed between the sponsor and FDA. The FDA may grant deferrals for submission of data or full or partial waivers. Generally, PREA does not apply to any product for an indication for which orphan designation has been granted. However, if only one indication for a product has orphan designation, a pediatric assessment may still be required for any applications to market that same product for the non-orphan indication(s).

Orphan Drug Designation

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biologic intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States, and for which there is no reasonable expectation that the cost of developing and making available in the United States, a drug or biologic for this type of disease or condition will be recovered from sales in the United States, for that drug or biologic. Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. The orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including a full BLA, to market the same biologic for the same indication for seven years, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity. Orphan drug exclusivity does not prevent FDA from approving a different drug or biologic for the same

[Table of Contents](#)

disease or condition, or the same drug or biologic for a different disease or condition. Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the BLA application user fee.

A designated orphan drug may not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Expedited Development and Review Programs

The FDA has a fast track program that is intended to expedite or facilitate the process for reviewing new products that meet certain criteria. Specifically, new products are eligible for fast track designation if they are intended to treat a serious or life-threatening disease or condition and demonstrate the potential to address unmet medical needs for the disease or condition. Fast track designation applies to the combination of the product and the specific indication for which it is being studied. Unique to a fast track product, the FDA may consider for review sections of the BLA on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the BLA, the FDA agrees to accept sections of the BLA and determines that the schedule is acceptable, and the sponsor pays any required user fees upon submission of the first section of the BLA.

Any product, submitted to the FDA for approval, including a product with a fast track designation, may also be eligible for other types of FDA programs intended to expedite development and review, such as priority review and accelerated approval. A product is eligible for priority review if it has the potential to provide safe and effective therapy where no satisfactory alternative therapy exists or a significant improvement in the treatment, diagnosis or prevention of a disease compared to marketed products. The FDA will attempt to direct additional resources to the evaluation of an application for a new product designated for priority review in an effort to facilitate the review.

Additionally, depending on the design of the applicable clinical studies, a product may be eligible for accelerated approval. In particular, products studied for their safety and effectiveness in treating serious or life-threatening diseases or conditions may receive accelerated approval upon a determination that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit, taking into account the severity, rarity, or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug or biological product receiving accelerated approval perform adequate and well-controlled post-marketing clinical studies and may require such confirmatory studies to be underway prior to granting any accelerated approval. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product.

In addition, breakthrough therapy designation is intended to expedite the development and review of products that treat serious or life-threatening conditions. The designation by FDA requires preliminary clinical evidence that a product candidate, alone or in combination with other drugs and biologics, demonstrates substantial improvement over currently available therapy on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. If the FDA designates a breakthrough therapy, it may take actions appropriate to expedite the development and review of the application, which may include holding meetings with the sponsor and the review team throughout the development of the therapy; providing timely advice to, and interactive communication with, the sponsor regarding the development of the drug to ensure that the development program to gather the nonclinical and clinical data necessary for approval is as efficient as practicable; involving senior managers and experienced review staff, as appropriate, in a collaborative, cross-disciplinary review; assigning a cross-disciplinary project lead for the FDA review team to facilitate an efficient review of the development program and to serve as a scientific liaison between the review team and the sponsor; and considering alternative clinical trial designs when scientifically appropriate, which may result in smaller trials or more efficient trials that require less time to complete and may minimize the number of patients exposed to a potentially less efficacious treatment. Breakthrough therapy designation comes with all of the benefits of fast track designation, which means that the sponsor may submit sections of the BLA for review on a rolling basis if certain conditions are satisfied, including an agreement with FDA on the proposed schedule for submission of portions of the application and the payment of applicable user fees before the FDA may initiate a review. The breakthrough therapy designation is a distinct status

[Table of Contents](#)

from both accelerated approval and priority review, which can also be granted to the same product if relevant criteria are met. If a product is designated as breakthrough therapy, FDA will expedite the development and review of such product. Fast Track designation, priority review and breakthrough therapy designation do not change the standards for approval but may expedite the development or approval process.

Post-Approval Requirements

Any products for which we receive FDA approvals are subject to continuing regulation by the FDA, including, among other things, record-keeping requirements, reporting of adverse experiences with the product, providing the FDA with updated safety and efficacy information, product sampling and distribution requirements, and complying with FDA promotion and advertising requirements, which include, among others, standards for direct-to-consumer advertising, restrictions on promoting products for uses or in patient populations that are not described in the product's approved uses (known as "off-label use"), limitations on industry-sponsored scientific and educational activities, and requirements for promotional activities involving the internet. Although a physician may prescribe a legally available product for an off-label use, if the physicians deems such product to be appropriate in his/her professional medical judgment, a manufacturer may not market or promote off-label uses. However, companies may share truthful and not misleading information that is otherwise consistent with a product's FDA approved labeling. A company that is found to have promoted off-label use of its product may be subject to significant liability, including administrative, civil and criminal sanctions.

In addition, quality control and manufacturing procedures must continue to conform to applicable manufacturing requirements after approval to ensure the long-term stability of the product. cGMP regulations require among other things, quality control and quality assurance as well as the corresponding maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved products are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP and other laws. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance. Discovery of problems with a product after approval may result in restrictions on a product, manufacturer, or holder of an approved BLA including, among other things, recall or withdrawal of the product from the market. In addition, changes to the manufacturing process are strictly regulated, and depending on the significance of the change, may require prior FDA approval before being implemented. Other types of changes to the approved product, such as adding new indications and claims, are also subject to further FDA review and approval.

The FDA also may require post-marketing testing, known as Phase 4 testing, and surveillance to monitor the effects of an approved product. Discovery of previously unknown problems with a product or the failure to comply with applicable FDA requirements can have negative consequences, including adverse publicity, judicial or administrative enforcement, warning letters from the FDA, mandated corrective advertising or communications with doctors, and civil or criminal penalties, among others. Newly discovered or developed safety or effectiveness data may require changes to a product's approved labeling, including the addition of new warnings and contraindications, and also may require the implementation of other risk management measures. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

U.S. Marketing Exclusivity

The Biologics Price Competition and Innovation Act (BPCIA), amended the PHSA to authorize the FDA to approve similar versions of innovative biologics, commonly known as biosimilars. A competitor seeking approval of a biosimilar must file an application to establish its molecule as highly similar to an approved innovator biologic, among other requirements. The BPCIA, however, bars the FDA from approving biosimilar applications for 12 years after an innovator biological product receives initial marketing approval. This 12-year period of data exclusivity may be extended by six months, for a total of 12.5 years, if the FDA requests that the innovator company conduct pediatric clinical investigations of the product.

Depending upon the timing, duration and specifics of the FDA approval of the use of our product candidates, some of our U.S. patents, if granted, may be eligible for limited patent term extension under the Hatch-Waxman Act. The Hatch-Waxman Act permits a patent restoration term of up to five years, as compensation for patent term lost during product development and the FDA regulatory review process. However, patent term restoration cannot extend the

[Table of Contents](#)

remaining term of a patent beyond a total of 14 years from the product's approval date. The patent term restoration period is generally one-half the time between the effective date of an IND and the submission date of a BLA plus the time between the submission date of a BLA and the approval of that application. Only one patent applicable to an approved product is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The U.S. Patent and Trademark Office, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may intend to apply for restoration of patent term for one of our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant BLA.

Pediatric exclusivity is another type of regulatory market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA-issued "Written Request" for such a trial.

Other U.S. Healthcare Laws and Compliance Requirements

In the United States, our activities are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including but not limited to, the Centers for Medicare & Medicaid Services (CMS), other divisions of the U.S. Department of Health and Human Services (HHS), for example, the Office of Inspector General, the U.S. Department of Justice (DOJ) and individual U.S. Attorney offices within the DOJ, and state and local governments. For example, our business practices, including our research and any future sales, marketing and scientific/educational grant programs may be required to comply with federal anti-kickback and fraud and abuse laws, the false claims laws, the data privacy and security provisions of the Health Insurance Portability and Accountability Act (HIPAA), federal transparency requirements and similar state laws, each as amended.

The federal Anti-Kickback Statute prohibits, among other things, any person or entity, from knowingly and willfully offering, paying, soliciting or receiving any remuneration, including any kickback, bribe or rebate, directly or indirectly, overtly or covertly, in cash or in kind, to induce or in return for, either the referral of an individual for, or the purchasing, leasing, ordering or arranging for the purchase, lease or order of any item or service reimbursable, in whole or in part, under Medicare, Medicaid or other federal healthcare programs. The term remuneration has been interpreted broadly to include anything of value. The federal Anti-Kickback Statute has been interpreted to apply to arrangements between pharmaceutical manufacturers on one hand and prescribers, purchasers and formulary managers on the other. Additionally, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. Rather, if "one purpose" of the remuneration is to induce referrals, the federal Anti-Kickback Statute is violated. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution. The exceptions and safe harbors are drawn narrowly and require strict compliance in order to offer protection. Practices that involve remuneration that may be alleged to be intended to induce prescribing, purchasing or recommending may be subject to scrutiny if they do not qualify for an exception or safe harbor. Failure to meet all of the requirements of a particular applicable statutory exception or regulatory safe harbor does not make the conduct per se illegal under the federal Anti-Kickback Statute. Instead, the legality of the arrangement will be evaluated on a case-by-case basis based on a cumulative review of all of its facts and circumstances. Our practices may not in all cases meet all of the criteria for protection under a statutory exception or regulatory safe harbor.

The federal civil monetary penalties statute imposes penalties against any person or entity who, among other things, is determined to have knowingly presented or caused to be presented a false or fraudulent claim to, among others, a federal healthcare program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

The federal civil False Claims Act (FCA) prohibits, among other things, any person or entity from knowingly presenting, or causing to be presented, a false claim for payment to, or approval by, the federal government or knowingly making, using, or causing to be made or used a false record or statement material to a false or fraudulent claim to the federal government in order to avoid, decrease or conceal an obligation to pay money to the federal government. As a result of a modification made by the Fraud Enforcement and Recovery Act of 2009, a claim includes "any request or demand" for money or property presented to the federal government. Pharmaceutical and other healthcare companies are being investigated or, in the past, have been prosecuted under these laws for, among

[Table of Contents](#)

other things, allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product. In addition, pharmaceutical and other healthcare companies also have been prosecuted for causing false claims to be submitted because of the companies' marketing of the product for unapproved, and thus non-reimbursable, uses. Moreover, a claim that includes items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the FCA.

HIPAA created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme or artifice to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third-party payors and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Similar to the federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

We may be subject to data privacy and security regulations by both the federal government and the states in which we conduct our business. For example, HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH), and their implementing regulations, imposes requirements on certain types of individuals and entities, including covered entities, for example, certain healthcare providers, health plans and healthcare clearinghouses, and their respective business associates that create, receive, maintain or transmit individually identifiable health information for or on behalf of a covered entity and their subcontractors that use, disclose, access, or otherwise process individually identifiable protected health information, relating to the privacy, security and transmission of individually identifiable health information. In addition, state laws govern the privacy and security of health information in specified circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Additionally, the federal Physician Payments Sunshine Act and its implementing regulations, require that certain manufacturers of drugs, devices, biological and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program, with certain exceptions, annually report information to CMS related to certain payments or other transfers of value made or distributed to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors), certain non-physician practitioners (physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, anesthesiologist assistants, and certified nurse midwives) and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, the physicians and teaching hospitals and to report annually certain ownership and investment interests held by physicians and their immediate family members.

Also, many states have similar fraud and abuse statutes or regulations similar to the aforementioned federal laws that apply to items and services reimbursed under Medicaid and other state programs, or, in several states, apply regardless of the payor. In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of drug and biological products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states and local jurisdictions have enacted legislation requiring pharmaceutical and biotechnology companies to establish marketing compliance programs and comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical and biotechnology companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

If our operations are found to be in violation of any of the federal and state healthcare laws described above or any other governmental regulations that apply to us, we may be subject to significant penalties, including without

limitation, civil, criminal and/or administrative penalties, damages, fines, disgorgement, imprisonment, exclusion from participation in government programs, such as Medicare and Medicaid, injunctions, contractual damages, reputational harm, administrative burdens, diminished profits and future earnings, additional reporting requirements and/or oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Data Privacy and Security Laws

Numerous state, federal and foreign laws, regulations and standards govern the collection, use, access to, confidentiality and security of health-related and other personal information, and could apply now or in the future to our operations or the operations of our partners. In the United States, numerous federal and state laws and regulations, including data breach notification laws, health information privacy and security laws and consumer protection laws and regulations govern the collection, use, disclosure, and protection of health-related and other personal information. In addition, certain foreign laws govern the privacy and security of personal data, including health-related data. Privacy and security laws, regulations, and other obligations are constantly evolving, may conflict with each other to complicate compliance efforts, and can result in investigations, proceedings, or actions that lead to significant civil and/or criminal penalties and restrictions on data processing.

Coverage, Pricing and Reimbursement

Significant uncertainty exists as to the coverage and reimbursement status of any product candidates for which we obtain regulatory approval. In the United States and certain markets in other countries, sales of any products for which we receive regulatory approval for commercial sale will depend, in part, on the extent to which third-party payors provide coverage, and establish adequate reimbursement levels for such products. No uniform policy for coverage and reimbursement exists in the United States, and coverage and reimbursement can differ significantly from payor to payor. As a result, the coverage determination process is often time-consuming and costly.

In the United States, third-party payors include federal and state healthcare programs, private managed care providers, health insurers and other organizations. The process for determining whether a third-party payor will provide coverage for a product may be separate from the process for setting the price of a product or from establishing the reimbursement rate that such a payor will pay for the product. Third-party payors may limit coverage to specific products on an approved list, also known as a formulary, which might not include all of the FDA-approved products for a particular indication. Third-party payors are increasingly challenging the price, examining the medical necessity and reviewing the cost-effectiveness of medical products, therapies and services, in addition to questioning their safety and efficacy. We may need to conduct expensive pharmaco-economic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain the FDA approvals. Our product candidates may not be considered medically necessary or cost-effective. A payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a product does not assure that other payors will also provide coverage for the product. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development. Additionally, any companion diagnostic test that we develop will be required to obtain coverage and reimbursement separate and apart from the coverage and reimbursement we seek for our product candidates, if approved.

Different pricing and reimbursement schemes exist in other countries. In the EU, governments influence the price of pharmaceutical products through their pricing and reimbursement rules and control of national health care systems that fund a large part of the cost of those products to consumers. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular product candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. The downward pressure on health care costs has become very intense. As a result, increasingly high barriers are being erected to the entry of new products. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country. Accordingly, in markets outside the United States, the reimbursement for our products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenue and profits.

[Table of Contents](#)

The marketability of any product candidates for which we receive regulatory approval for commercial sale may suffer if the government and third-party payors fail to provide adequate coverage and reimbursement. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on healthcare pricing. Coverage policies and third-party reimbursement rates may change at any time. Even if favorable coverage and reimbursement status is attained for one or more products for which we receive regulatory approval, less favorable coverage policies and reimbursement rates may be implemented in the future.

Healthcare Reform

In the United States and some foreign jurisdictions, there have been, and continue to be, several legislative and regulatory changes and proposed changes regarding the healthcare system that could prevent or delay marketing approval of product candidates, restrict or regulate post-approval activities, and affect the ability to profitably sell product candidates for which marketing approval is obtained. Among policy makers and payors in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives.

For example, the Affordable Care Act has substantially changed healthcare financing and delivery by both governmental and private insurers. The Affordable Care Act and its implementing regulations, among other things, revised the methodology by which rebates owed by manufacturers to the state and federal government for covered outpatient drugs and certain biologics, including our product candidates, under the Medicaid drug rebate program are calculated, increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid drug rebate program, extended the Medicaid drug rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations, subjected manufacturers to new annual fees and taxes for certain branded prescription drugs, and provided incentives to programs that increase the federal government's comparative effectiveness research. Additionally, the Affordable Care Act allowed states to implement expanded eligibility criteria for Medicaid programs, imposed a new Medicare Part D coverage gap discount program, expanded the entities eligible for discounts under the Public Health Service pharmaceutical pricing program and implemented a new Patient-Centered Outcomes Research Institute. Since its enactment, there have been executive, judicial and political challenges to certain aspects of the Affordable Care Act. On June 17, 2021 the U.S. Supreme Court dismissed a challenge on procedural grounds that argued the Affordable Care Act is unconstitutional in its entirety because the "individual mandate" was repealed by Congress. Thus, the Affordable Care Act will remain in effect in its current form.

Other legislative changes have been proposed and adopted since the Affordable Care Act was enacted, including aggregate reductions to Medicare payments to providers, which went into effect beginning on April 1, 2013 and, due to subsequent legislative amendments to the statute will stay in effect through 2032, with the exception of a temporary suspension from May 1, 2020 through March 31, 2022, unless additional Congressional action is taken. Additionally, on March 11, 2021, President Biden signed the American Rescue Plan Act of 2021 into law, which eliminated the statutory Medicaid drug rebate cap, which was previously capped at 100% of a drug's average manufacturer price, for single source and innovator multiple source drugs, which began on January 1, 2024. Further, in January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. In addition, Congress is considering health reform measures as part of the other health reform initiatives.

Any reduction in reimbursement from Medicare and other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our products. Such reforms could have an adverse effect on anticipated revenue from product candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates.

Additionally, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and

[Table of Contents](#)

proposed and enacted federal legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. On August 16, 2022, the Inflation Reduction Act of 2022 (IRA) was signed into law which, among other things, (i) directs HHS to negotiate the price of certain high-expenditure, single-source drugs and biologics covered under Medicare, and subject drug manufacturers to civil monetary penalties and a potential excise tax by offering a price that is not equal to or less than the negotiated "maximum fair price" for such drugs and biologics under the law, and (ii) imposes rebates with respect to certain drugs and biologics covered under Medicare Part B or Medicare Part D to penalize price increases that outpace inflation. The IRA permits HHS to implement many of these provisions through guidance, as opposed to regulation, for the initial years. These provisions take effect progressively starting in fiscal year 2023. On August 29, 2023, HHS announced the list of the first ten drugs that will be subject to price negotiations, although the Medicare drug price negotiation program is currently subject to legal challenges. It is unclear how the IRA will be implemented but is likely to have a significant impact on the pharmaceutical industry.

Individual states in the United States have also become increasingly active in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

The Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act (FCPA), prohibits any U.S. individual or business from paying, offering, or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with accounting provisions requiring the company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Additional Regulation

In addition to the foregoing, state and federal laws regarding environmental protection and hazardous substances, including the Occupational Safety and Health Act, the Resource Conservancy and Recovery Act and the Toxic Substances Control Act, affect our business. These and other laws govern our use, handling and disposal of various biological, chemical and radioactive substances used in, and wastes generated by, our operations. If our operations result in contamination of the environment or expose individuals to hazardous substances, we could be liable for damages and governmental fines. We believe that we are in material compliance with applicable environmental laws and that continued compliance therewith will not have a material adverse effect on our business. We cannot predict, however, how changes in these laws may affect our future operations.

Europe / Rest of World Government Regulation

In addition to regulations in the United States, we will be subject to a variety of regulations in other jurisdictions governing, among other things, clinical trials and any commercial sales and distribution of our products. Whether or not we obtain FDA approval of a product, we must obtain the requisite approvals from regulatory authorities in foreign countries prior to the commencement of clinical trials or marketing of the product in those countries. Certain countries outside of the United States have a similar process that requires the submission of a clinical trial application much like the IND prior to the commencement of human clinical trials.

For other countries outside of the EU, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. In all cases, the clinical trials must be conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we or our potential collaborators fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension, variation or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

[Table of Contents](#)

Clinical Trials in the EU

Similarly to the United States, the various phases of non-clinical and clinical research in the European Union, or EU are subject to significant regulatory controls. In the EU, clinical trials are governed by the Clinical Trials Regulation (EU) No 536/2014 (CTR), which entered into application on January 31, 2022 repealing and replacing the former Clinical Trials Directive 2001/20 (CTD).

The CTR is intended to harmonize and streamline clinical trial authorizations, simplify adverse-event reporting procedures, improve the supervision of clinical trials and increase transparency. Specifically, the Regulation, which is directly applicable in all EU Member States, introduces a streamlined application procedure through a single-entry point, the “EU portal”, the Clinical Trials Information System (CTIS); a single set of documents to be prepared and submitted for the application; as well as simplified reporting procedures for clinical trial sponsors. A harmonized procedure for the assessment of applications for clinical trials has been introduced and is divided into two parts. Part I assessment is led by the competent authorities of a reference Member State selected by the trial sponsor and relates to clinical trial aspects that are considered to be scientifically harmonized across EU Member States. This assessment is then submitted to the competent authorities of all concerned Member States in which the trial is to be conducted for their review. Part II is assessed separately by the competent authorities and Ethics Committees in each concerned EU Member State. Individual EU Member States retain the power to authorize the conduct of clinical trials on their territory.

The extent to which on-going clinical trials will be governed by the CTR will depend on the duration of the individual clinical trial. For clinical trials in relation to which an application for approval was made on the basis of the CTD before (i) January 31, 2022 or (ii) between January 31, 2022 and January 31, 2023 and for which the sponsor has opted for the application of the CTD will continue to apply on a transitional basis until January 31, 2025. By that date, all ongoing trials will become subject to the provisions of the CTR. The CTR will apply to clinical trials from an earlier date if the related clinical trial application was made on the basis of the CTR or if the clinical trial has already transitioned to the CTR framework before January 31, 2025.

In all cases, clinical trials must be conducted in accordance with GCP and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki. Medicines used in clinical trials, including ATMPs, must be manufactured in accordance with the guidelines on cGMP and in a GMP licensed facility, which can be subject to GMP inspections.

EU Review and approval process of medicinal products

In the EU, medicinal products can only be commercialized after a related marketing authorization (MA) has been granted. To obtain an MA for a product in the EU, an applicant must submit a Marketing Authorization Application (MAA) either under a centralized procedure administered by the European Medicines Agency (EMA), or one of the procedures administered by the competent authorities of EU Member States (decentralized procedure, national procedure or mutual recognition procedure). An MA may be granted only to an applicant established in the EU.

The centralized procedure provides for the grant of a single MA by the European Commission that is valid throughout the EEA (which is comprised of the 27 EU Member States plus Norway, Iceland and Liechtenstein). Pursuant to Regulation (EC) No 726/2004, the centralized procedure is compulsory for specific products, including for (i) medicinal products derived from biotechnological processes, (ii) products designated as orphan medicinal products, (iii) advanced therapy medicinal products, or ATMPs, and (iv) products with a new active substance indicated for the treatment of HIV/AIDS, cancer, neurodegenerative diseases, diabetes, auto-immune and other immune dysfunctions and viral diseases. For products with a new active substance indicated for the treatment of other diseases and products that are highly innovative or for which a centralized process is in the interest of patients, authorization through the centralized procedure is optional on related approval.

Under the centralized procedure, the EMA's Committee for Medicinal Products for Human Use (CHMP) conducts the initial assessment of a product. The CHMP is also responsible for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing MA. The maximum timeframe for the evaluation of an MAA under the centralized procedure is 210 days, excluding clock stops when additional information or written or oral explanation is to be provided by the applicant in response to questions of the CHMP. Accelerated assessment may be granted by the CHMP in exceptional cases, when a medicinal product targeting an

[Table of Contents](#)

unmet medical need is expected to be of major interest from the point of view of public health and, in particular, from the viewpoint of therapeutic innovation. If the CHMP accepts a request for accelerated assessment, the time limit of 210 days will be reduced to 150 days (excluding clock stops). The CHMP can, however, revert to the standard time limit for the centralized procedure if it considers that it is no longer appropriate to conduct an accelerated assessment.

Unlike the centralized authorization procedure, the decentralized MA procedure requires a separate application to, and leads to separate approval by, the competent authorities of each EU Member State in which the product is to be marketed. This application is identical to the application that would be submitted to the EMA for authorization through the centralized procedure. The reference EU Member State prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. The resulting assessment report is submitted to the concerned EU Member States who, within 90 days of receipt, must decide whether to approve the assessment report and related materials. If a concerned EU Member State cannot approve the assessment report and related materials due to concerns relating to a potential serious risk to public health, disputed elements may be referred to the Heads of Medicines Agencies' Coordination Group for Mutual Recognition and Decentralised Procedures—Human (CMDh) for review. The subsequent decision of the European Commission is binding on all EU Member States.

The mutual recognition procedure allows companies that have a medicinal product already authorized in one EU Member State to apply for this authorization to be recognized by the competent authorities in other EU Member States. Like the decentralized procedure, the mutual recognition procedure is based on the acceptance by the competent authorities of the EU Member States of the MA of a medicinal product by the competent authorities of other EU Member States. The holder of a national MA may submit an application to the competent authority of an EU Member State requesting that this authority recognize the MA delivered by the competent authority of another EU Member State.

An MA has, in principle, an initial validity of five years. The MA may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA or by the competent authority of the EU Member State in which the original MA was granted. To support the application, the MA holder must provide the EMA or the competent authority with a consolidated version of the Common Technical Document providing up-to-date data concerning the quality, safety and efficacy of the product, including all variations introduced since the MA was granted, at least nine months before the MA ceases to be valid. The European Commission or the competent authorities of the EU Member States may decide on justified grounds relating to pharmacovigilance, to proceed with one further five year renewal period for the MA. Once subsequently definitively renewed, the MA shall be valid for an unlimited period. Any authorization which is not followed by the actual placing of the medicinal product on the EU market (for a centralized MA) or on the market of the authorizing EU Member State within three years after authorization ceases to be valid (the so-called sunset clause).

Innovative products that target an unmet medical need and are expected to be of major public health interest may be eligible for a number of expedited development and review programs, such as the Priority Medicines (PRIME) scheme, which provides incentives similar to the breakthrough therapy designation in the U.S. PRIME is a voluntary scheme aimed at enhancing the EMA's support for the development of medicinal products that target unmet medical needs. Eligible products must target conditions for which there is an unmet medical need (there is no satisfactory method of diagnosis, prevention or treatment in the EU or, if there is, the new medicinal product will bring a major therapeutic advantage) and they must demonstrate the potential to address the unmet medical need by introducing new methods of therapy or improving existing ones. Benefits accrue to sponsors of product candidates with PRIME designation, including but not limited to, early and proactive regulatory dialogue with the EMA, frequent discussions on clinical trial designs and other development program elements, and potentially accelerated MAA assessment once a dossier has been submitted.

In the EU, a "conditional" MA may be granted in cases where all the required safety and efficacy data are not yet available. The European Commission may grant a conditional MA for a medicinal product if it is demonstrated that all of the following criteria are met: (i) the benefit-risk balance of the medicinal product is positive; (ii) it is likely that the applicant will be able to provide comprehensive data post-authorization; (iii) the medicinal product fulfils an unmet medical need; and (iv) the benefit of the immediate availability to patients of the medicinal product is greater

than the risk inherent in the fact that additional data are still required. The conditional MA is subject to conditions to be fulfilled for generating the missing data or ensuring increased safety measures. It is valid for one year and must be renewed annually until all related conditions have been fulfilled. Once any pending studies are provided, the conditional MA can be converted into a traditional MA. However, if the conditions are not fulfilled within the timeframe set by the EMA and approved by the European Commission, the MA will cease to be renewed.

An MA may also be granted “under exceptional circumstances” where the applicant can show that it is unable to provide comprehensive data on efficacy and safety under normal conditions of use even after the product has been authorized and subject to specific procedures being introduced. These circumstances may arise in particular when the intended indications are very rare and, in the state of scientific knowledge at that time, it is not possible to provide comprehensive information, or when generating data may be contrary to generally accepted ethical principles. Like a conditional MA, an MA granted in exceptional circumstances is reserved to medicinal products intended to be authorized for treatment of rare diseases or unmet medical needs for which the applicant does not hold a complete data set that is required for the grant of a standard MA. However, unlike the conditional MA, an applicant for authorization in exceptional circumstances is not subsequently required to provide the missing data. Although the MA “under exceptional circumstances” is granted definitively, the risk-benefit balance of the medicinal product is reviewed annually, and the MA will be withdrawn if the risk-benefit ratio is no longer favorable.

Advanced Therapy Medicinal Products in the EU

ATMPs include gene therapy products as well as somatic cell therapy products and tissue engineered products. The grant of marketing authorization in the EU for products containing viable human tissues or cells such as gene therapy medicinal products is governed by Regulation (EC) No. 1394/2007 on ATMPs, read in combination with Directive (EC) No. 2001/83 of the European Parliament and of the Council, commonly known as the Community code on medicinal products. Regulation (EC) No. 1394/2007 establishes specific rules concerning the authorization, supervision and pharmacovigilance of gene therapy medicinal products, somatic cell therapy medicinal products and tissue engineered products. Manufacturers of advanced therapy medicinal products must demonstrate the quality, safety and efficacy of their products to the EMA which is required to provide an opinion regarding the application for marketing authorization. The European Commission grants or refuses marketing authorization in light of the opinion delivered by the EMA.

Cell-based products must also comply with Directive (EC) No. 2004/23 of the European Parliament and of the Council of March 31, 2004 on setting standards of quality and safety for the donation, procurement, testing, processing, preservation, storage and distribution of human tissues and cells, or the Tissues and Cells Directive, as well as its technical implementing directives. This Directive describes the conditions and quality requirements which must be applied when sourcing the cells intended for manufacturing of the cell-based medicinal product. The EU Member States have transposed the Tissues and Cells Directive into their national laws. However, various interpretations of the Tissue and Cells Directive have occurred and are reflected in individual EU Member States national implementing legislation which have led to diverging approaches.

Pediatric Development in the EU

In the EU, Regulation (EC) No 1901/2006 provides that all MAAs for new medicinal products have to include the results of trials conducted in the pediatric population, in compliance with a pediatric investigation plan, or PIP, agreed with the EMA's Pediatric Committee (PDCO). The PIP sets out the timing and measures proposed to generate data to support a pediatric indication of the medicinal product for which MA is being sought. The PDCO can grant a deferral of the obligation to implement some or all of the measures provided in the PIP until there are sufficient data to demonstrate the efficacy and safety of the product in adults. Further, the obligation to provide pediatric clinical trial data can be waived by the PDCO when these data are not needed or appropriate because the product is likely to be ineffective or unsafe in children, the disease or condition for which the product is intended occurs only in adult populations, or when the product does not represent a significant therapeutic benefit over existing treatments for pediatric patients. Once the MA is obtained in all EU Member States and study results are included in the product information, even when negative, the product is eligible for a six-month extension to the Supplementary Protection Certificate (SPC), if any is in effect at the time of authorization or, in the case of orphan medicinal products, a two-year extension of orphan market exclusivity.

Manufacturing Regulation in the EU

In addition to an MA, various other requirements apply to the manufacturing and placing on the EU market of medicinal products. The manufacturing of medicinal products in the EU requires a manufacturing authorization and

import of medicinal products into the EU requires a manufacturing authorization allowing for import. The manufacturing authorization holder must comply with various requirements set out in the applicable EU laws, regulations and guidance, including EU cGMP standards. Similarly, the distribution of medicinal products within the EU is subject to compliance with the applicable EU laws, regulations and guidelines, including the requirement to hold appropriate authorizations for distribution granted by the competent authorities of EU Member States. Marketing authorization holders and/or manufacturing and import authorization, or MA holders and/or distribution authorization holders may be subject to civil, criminal or administrative sanctions, including suspension of manufacturing authorization, in case of non-compliance with the EU or EU Member States' requirements applicable to the manufacturing of medicinal products.

Data and Market Exclusivity in the EU

The EU provides opportunities for data and market exclusivity related to MAs. Upon receiving an MA, innovative medicinal products are generally entitled to receive eight years of data exclusivity and ten years of market exclusivity. Data exclusivity, if granted, prevents regulatory authorities in the EU from referencing the innovator's data to assess a generic application or biosimilar application for eight years from the date of authorization of the innovative product, after which a generic or biosimilar MAA can be submitted, and the innovator's data may be referenced. The market exclusivity period prevents a successful generic or biosimilar applicant from commercializing its product in the EU until 10 years have elapsed from the initial MA of the reference product in the EU. The overall ten-year period may, occasionally, be extended for a further year to a maximum of 11 years if, during the first eight years of those ten years, the MA holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. However, there is no guarantee that a product will be considered by the EU's regulatory authorities to be a new chemical/biological entity, and products may not qualify for data exclusivity.

In the EU, there is a special regime for biosimilars, or biological medicinal products that are similar to a reference medicinal product but that do not meet the definition of a generic medicinal product. For such products, the results of appropriate preclinical or clinical trials must be provided in support of an application for MA. Guidelines from the EMA detail the type of quantity of supplementary data to be provided for different types of biological product.

Orphan Designation in the EU

In the EU, Regulation (EC) No. 141/2000, as implemented by Regulation (EC) No. 847/2000 provides that a medicinal product can be designated as an orphan medicinal product by the European Commission if its sponsor can establish that: (i) the product is intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions; (ii) either (a) such conditions affect not more than five in 10,000 persons in the EU when the application is made, or (b) the product without the benefits derived from orphan status, would not generate sufficient return in the EU to justify the necessary investment in developing the medicinal product; and (iii) there exists no satisfactory authorized method of diagnosis, prevention, or treatment of the condition that has been authorized in the EU, or even if such method exists, the product will be of significant benefit to those affected by that condition.

Regulation (EC) No 847/2000 sets out further provisions for implementation of the criteria for designation of a medicinal product as an orphan medicinal product. An application for the designation of a medicinal product as an orphan medicinal product must be submitted at any stage of development of the medicinal product but before filing of an MAA. An MA for an orphan medicinal product may only include indications designated as orphan. For non-orphan indications treated with the same active pharmaceutical ingredient, a separate marketing authorization has to be sought.

Orphan medicinal product designation entitles an applicant to incentives such fee reductions or fee waivers, protocol assistance, and access to the centralized marketing authorization procedure. Upon grant of a marketing authorization, orphan medicinal products are entitled to a ten-year period of market exclusivity for the approved therapeutic indication, which means that the EMA cannot accept another marketing authorization application or accept an application to extend for a similar product and the European Commission cannot grant a marketing authorization for the same indication for a period of ten years. The period of market exclusivity is extended by two years for orphan medicinal products that have also complied with an agreed PIP. No extension to any supplementary protection certificate can be granted on the basis of pediatric studies for orphan indications. Orphan medicinal

product designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

The period of market exclusivity may, however, be reduced to six years if, at the end of the fifth year, it is established that the product no longer meets the criteria on the basis of which it received orphan medicinal product designation, including where it can be demonstrated on the basis of available evidence that the original orphan medicinal product is sufficiently profitable not to justify maintenance of market exclusivity or where the prevalence of the condition has increased above the threshold. Additionally, an MA may be granted to a similar medicinal product with the same orphan indication during the ten year period if: (i) if the applicant consents to a second original orphan medicinal product application, (ii) if the manufacturer of the original orphan medicinal product is unable to supply sufficient quantities; or (iii) if the second applicant can establish that its product, although similar, is safer, more effective or otherwise clinically superior to the original orphan medicinal product. A company may voluntarily remove a product from the register of orphan products.

Post-authorization Requirements in the EU

Where an MA is granted in relation to a medicinal product in the EU, the holder of the MA is required to comply with a range of regulatory requirements applicable to the manufacturing, marketing, promotion and sale of medicinal products. Similar to the United States, both MA holders and manufacturers of medicinal products are subject to comprehensive regulatory oversight by the EMA, the European Commission and/or the competent regulatory authorities of the individual EU Member States. The holder of an MA must establish and maintain a pharmacovigilance system and appoint an individual qualified person for pharmacovigilance who is responsible for oversight of that system. Key obligations include expedited reporting of suspected serious adverse reactions and submission of periodic safety update reports (PSURs).

All new MAAs must include a risk management plan (RMP) describing the risk management system that the company will put in place and documenting measures to prevent or minimize the risks associated with the product. The regulatory authorities may also impose specific obligations as a condition of the MA. Such risk- minimization measures or post-authorization obligations may include additional safety monitoring, more frequent submission of PSURs, or the conduct of additional clinical trials or post-authorization safety studies.

In the EU, the advertising and promotion of medicinal products are subject to both EU and EU Member States' laws governing promotion of medicinal products, interactions with physicians and other healthcare professionals, misleading and comparative advertising and unfair commercial practices. General requirements for advertising and promotion of medicinal products, such as direct-to-consumer advertising of prescription medicinal products are established in EU law. However, the details are governed by regulations in individual EU Member States and can differ from one country to another. For example, applicable laws require that promotional materials and advertising in relation to medicinal products comply with the product's Summary of Product Characteristic (SmPC), which may require approval by the competent national authorities in connection with an MA. The SmPC is the document that provides information to physicians concerning the safe and effective use of the product. Promotional activity that does not comply with the SmPC is considered off-label and is prohibited in the EU.

Pricing, Coverage and Reimbursement in the EU

In the EU, pricing and reimbursement schemes vary widely from country to country. Some EU Member States may approve a specific price for a product, or they may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other EU Member States allow companies to fix their own prices for products but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions.

In addition, some EU Member States may require the completion of additional studies that compare the cost-effectiveness of a particular medicinal product candidate to currently available therapies. This Health Technology Assessment (HTA) process is the procedure according to which the assessment of the public health impact, therapeutic impact and the economic and societal impact of use of a given medicinal product in the national healthcare systems of the individual country is conducted. The outcome of HTA regarding specific medicinal products will often influence the pricing and reimbursement status granted to these medicinal products by the competent authorities of individual EU Member States. In December 2021, Regulation No 2021/2282 on Health Technology Assessment (HTA Regulation) was adopted. The HTA Regulation is intended to boost cooperation among

[Table of Contents](#)

EU Member States in assessing health technologies, including new medicinal products, and providing the basis for cooperation at EU level for joint clinical assessments in these areas. When it enters into application in 2025, the HTA Regulation will be intended to harmonize the clinical benefit assessment of HTA across the European Union.

Corporate Philanthropy

We have joined the Pledge 1% Movement, a global movement that supports the integration of philanthropy into corporate culture by inspiring companies to donate 1% of product, equity, profit, or employee time to causes of their choice, demonstrating our commitment to philanthropic leadership, particularly in the biotechnology sector. As such, in July 2021, our board of directors approved the reservation of up to 370,865 shares of our common stock (which was approximately 1.0% of our fully-diluted capitalization as of that date) that we may issue to or for the benefit of a charitable foundation established by us or other appropriate charitable recipients pursuant to our Pledge 1% Movement commitment. The common stock will be donated in equal installments over five years following this offering or in full upon a sale of our company, in each case first subject to certain per-share valuation thresholds for our common stock. We have not yet issued any such reserved common stock. If any reserved common stock is issued pursuant to our Pledge 1% Movement commitment, we may incur a non-cash expense in the quarter that we issue such shares equal to the fair value of the shares of our common stock issued. Such donation of shares may also dilute our stockholders' ownership of our common stock. Pursuant to this pledge, we plan to implement programs to encourage our employees to donate 1% of their time to charitable causes.

Facilities

Our principal office is located at 5505 Morehouse Drive, Suite 100, San Diego, California 92121, where we lease 51,621 square feet of space to house our principal office, research and process development laboratories and a cGMP manufacturing center to support our pipeline development and clinical trial supply. This lease will expire in 2029, subject to our option to an additional five-year term. We also have a lease agreement for an additional 13,405 square feet of office space in San Diego, California. We lease this space under a lease that terminates in June 2025. In addition, we have entered into a temporary license agreement for our occupation and use of an additional 11,960 square feet of office and laboratory space in San Diego, California. We believe that these facilities will be adequate for our near-term needs. If required, we believe that suitable additional or alternative space would be available in the future on commercially reasonable terms.

Employees and Human Capital Resources

As of May 31, 2024, we had 81 full-time employees, 16 of whom held an M.D., Pharm.D. or Ph.D. degree and all of whom are engaged in research and development activities, operations, finance and administration. None of our employees are represented by a labor union or covered by a collective bargaining agreement. We consider our relationship with our employees to be good.

Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and new employees, advisors and consultants. The principal purposes of our equity and cash incentive plans are to attract, retain and reward personnel through the granting of stock-based and cash-based compensation awards, in order to increase stockholder value and the success of our company by motivating such individuals to perform to the best of their abilities and achieve our objectives.

Legal Proceedings

From time to time, we may become involved in litigation or other legal proceedings. We are not currently a party to any litigation or legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

MANAGEMENT

Executive Officers and Directors

The following table provides information regarding our current executive officers and directors as of May 31, 2024:

NAME	AGE	POSITION(S)
Executive Officers		
Fred Aslan, M.D.	49	President, Chief Executive Officer and Director
Neha Krishnamohan	37	Chief Financial Officer and Executive Vice President of Corporate Development
Christopher P. Horan	57	Chief Technical Operations Officer
Thorsten Graef, M.D., Ph.D.	48	Chief Medical Officer
Jennifer Bush	49	Chief Operating Officer, Chief Legal Officer, Corporate Secretary and Compliance Officer
Heather Raymon, Ph.D.	60	Senior Vice President of Research and Early Development
Non-Employee Directors		
Brian Daniels, M.D. ⁽¹⁾⁽²⁾⁽³⁾	65	Chairperson of the Board of Directors
Laura Bessen, M.D. ⁽¹⁾⁽²⁾	61	Director
Elizabeth Hougen ⁽¹⁾	62	Director
Yong-Jun Huh	49	Director
James Park ⁽⁴⁾	58	Director
Diego Miralles, M.D.	61	Director
Laura Stoppel, Ph.D. ⁽³⁾	38	Director
Yvonne Yamanaka, Ph.D. ⁽⁴⁾	38	Director

⁽¹⁾ Member of the audit committee.

⁽²⁾ Member of the compensation committee.

⁽³⁾ Member of the nominating and corporate governance committee.

⁽⁴⁾ Mr. Park and Dr. Yamanaka have notified us that they each intend to resign from our board of directors effective as of immediately prior to the effectiveness of the registration statement of which this prospectus forms a part.

Executive Officers

Fred Aslan, M.D., has served as our President and Chief Executive Officer and as a member of our board of directors since January 2021. Prior to his employment with us as our Chief Executive Officer, Dr. Aslan provided consulting services to us in December 2020. From September 2018 to December 2020, Dr. Aslan served as President and Chief Business Officer of Vividion Therapeutics, Inc. (Vividion), a private company focused on developing a range of small molecule therapies for oncology and immunology indications, where he was responsible for business development, finance, alliance and product management, and operations. From January 2011 to August 2018, Dr. Aslan was Founder and Chief Executive Officer of Adavium Medical, Ltd., a private Brazilian medical device and in vitro diagnostics company. From June 2006 to August 2013, he was a Vice President at Venrock, a venture capital firm. While at Venrock, Dr. Aslan was a co-founder and served as a board member at Receptos Pharmaceuticals, Inc. Prior to that, Dr. Aslan was Director of Corporate Development and Head of Investor Relations at Curagen Corporation, an oncology-focused biotechnology company, and a consultant to healthcare clients at Boston Consulting Group. Dr. Aslan received a B.S. in Biology from Duke University, and M.D. from Yale University, and an M.B.A. from Harvard Business School. Our board of directors believes that Dr. Aslan's extensive scientific, business and executive-level management experience in the biotechnology industry qualify him to serve on our board of directors.

Neha Krishnamohan, joined us as our Chief Financial Officer and Executive Vice President of Corporate Development in April 2024. Previously, Ms. Krishnamohan served as Chief Financial Officer and Executive Vice President of Corporate Development at Kinnate Biopharma Inc., a clinical stage precision oncology company from June 2021 until its acquisition by XOMA Corporation in April 2024. From July 2008 to June 2021, Ms. Krishnamohan worked at Goldman Sachs & Co. LLC, where she served most recently as Vice President, Healthcare Investment Banking from January 2015 to June 2021 and was an Associate in the Healthcare Investment Banking Group from

[Table of Contents](#)

August 2011 to December 2014. Ms. Krishnamohan currently serves on the board of directors of Arcutis Biotherapeutics, Inc. Ms. Krishnamohan received a B.S.E. with a double major in Biomedical Engineering and Economics from Duke University.

Christopher P. Horan, joined us as our Chief Technical Operations Officer in December 2021. Previously, Mr. Horan served as Chief Technical Operations Officer at Sanbio Company Limited, a private biopharmaceutical company, since July 2020. From April 2018 to May 2020, Mr. Horan served as Chief Technical Operations Officer at Dermira, Inc. (Dermira), a then-private biotechnology company. Prior to Dermira, Mr. Horan served as Senior Vice President for global product and supply chain management at Genentech, Inc., a commercial-stage biotechnology company, from August 2004 to March 2018, and as Director/Business Partner and in other roles at Merck & Company, Inc. from 1988 to 2004. Mr. Horan received a B.E. from Stevens Institute of Technology.

Thorsten Graef, M.D., Ph.D., joined us as our Chief Medical Officer in June 2022. Previously, Dr. Graef served as Chief Medical Officer of Acepodia USA, a private cell therapy company, from May 2021 through April 2022. Prior to Acepodia USA, Dr. Graef served as Vice President, Early Oncology at AbbVie Inc., a biotechnology company, from March 2019 through April 2021. Prior to this position at AbbVie, Dr. Graef served as Head of Development of Pharmacocyclics at Abbvie from December 2014 to February 2019, and as its Vice President of Clinical Research from October 2012 to December 2014. Earlier in his career, Dr. Graef was a Medical Director at Merck & Company, Inc. Dr. Graef received M.D. and Ph.D. degrees from the University of Dusseldorf and was a Research Scholar in Structural Biology and Immunology at Stanford University School of Medicine.

Jennifer Bush, has served as our Chief Operating Officer since April 2024, and as our Executive Vice President, Chief Legal Officer, Corporate Secretary and Compliance Officer since February 2021 and was previously our Executive Vice President, General Counsel and Secretary since September 2020. Previously, Ms. Bush served as Senior Vice President, General Counsel, Head of Human Resources and Regulatory Affairs at Organovo, Inc., a publicly held biotechnology company, from September 2014 to August 2020. Prior to Organovo, Inc., Ms. Bush served as Associate General Counsel & Global Privacy Officer at Broadcom Corporation, a publicly held semiconductor and infrastructure software company, from October 2010 to August 2014 and as Associate General Counsel at DivX, Inc., a private digital entertainment company, from February 2010 to October 2010. Earlier in her career, Ms. Bush was a Principal at Fish & Richardson P.C. and an Associate at Irell & Manella LLP. Ms. Bush received her A.B. in History from Princeton University and her J.D. from Yale Law School. She subsequently served as a Law Clerk to the Honorable Stanley Marcus, of the U.S. Court of Appeals for the 11th Circuit.

Heather Raymon, Ph.D., has served as our Senior Vice President, Research and Early Development since January 2023 and previously served as our Vice President, Early Development and Program Management from October 2020 through December 2022. Previously, Dr. Raymon served as Executive Director, Early Development Program Lead at BMS, a public pharmaceutical company, from November 2019 to October 2020. Prior to BMS, Dr. Raymon served as Senior Director and then Executive Director of Global Project Leadership, Research and Early Development at Celgene Corporation, a public pharmaceutical company prior to its acquisition by BMS in 2019, from January 2016 to November 2019, and as Head of Pharmacology, Research and Early Development from 2001 to 2015. Dr. Raymon received her B.S. in biology from the State University of New York at Albany, her Ph.D. in pharmacology and toxicology from the University of California, Irvine and was a postdoctoral fellow at the Salk Institute for Biological Studies and the University of California, San Diego.

Non-Employee Directors

Laura Bessen, M.D., has served as a member of our board of directors since March 2022. Since 2021, Dr. Bessen has served as the Managing Partner at Maxsam Advisors, LLC, a healthcare consulting company. Dr. Bessen previously held various roles at BMS from 2001 to 2016, most recently serving as Vice President, Head of U.S. Medical between 2013 and 2016. Dr. Bessen has served as a member of the board of directors of C4 Therapeutics, Inc., since August 2022, and as a member of the board of governors for Main Line Health System since July 2023. Dr. Bessen holds an M.D. from New York University School of Medicine and a B.S. in Biochemistry from State University of New York at Binghamton. Dr. Bessen completed her clinical training in Internal Medicine at Mount Sinai Medical Center and her fellowship in Infectious Diseases at Albert Einstein College of Medicine. Our board of directors believes that Dr. Bessen's extensive medical and executive-level business experience in the pharmaceutical industry qualifies her to serve on our board of directors.

[Table of Contents](#)

Brian Daniels, M.D., has served as Chairperson of our board of directors since June 2020 and has served as a Partner at 5AM Venture Management LLC, a life-science focused venture capital firm, since August 2018, which he joined as a Venture Partner in October 2014. Previously, Dr. Daniels served as Senior Vice President, Global Development and Medical Affairs at BMS from 2004 to 2014 and Vice President, Immunology at BMS from 2000 to 2004. Dr. Daniels served as a member of the board of directors of Ideaya Biosciences, Inc. from June 2018 to January 2019, Novo Nordisk A S from March 2016 to March 2021, and Cabaletta from October 2018 to June 2021. Dr. Daniels received his B.S. and M.S. degrees from Massachusetts Institute of Technology and his M.D. from Washington University in St. Louis. He completed his residency in internal medicine at New York Hospital and a fellowship in rheumatology and immunology at University of California, San Francisco. Our board of directors believes that Dr. Daniels' expertise and leadership experience in the venture capital industry and in the life sciences industry qualify him to serve on our board of directors.

Elizabeth Hougen, has served as a member of our board of directors since April 2021 and has served as Executive Vice President and Chief Financial Officer at Ionis Pharmaceuticals, Inc. (Ionis), a public biotechnology company, since April 2020. Previously, Ms. Hougen held various roles at Ionis, including serving as Senior Vice President, Finance and Chief Financial Officer, from January 2013 to March 2020, Vice President, Finance and Chief Accounting Officer, from January 2007 to December 2012, and Vice President, Finance from May 2000 to January 2007. Prior to joining Ionis in 2000, Ms. Hougen was Executive Director, Finance and Chief Financial Officer for Molecular Biosystems, Inc., a public biotechnology company. Ms. Hougen received her B.A. in Business from Franklin & Marshall College and her M.B.A. from the University of San Diego. Our board of directors believes that Ms. Hougen's extensive business and executive-level management experience in the biotechnology industry qualifies her to serve on our board of directors.

Yong-Jun Huh, has served as a member of our board of directors since September 2019 and has served as Chief Executive Officer of GC Corp., a public holdings company of Korea's leading biopharmaceutical group, 'Green Cross,' since March 2017. Since joining GC Corp. in August 2003, Mr. Huh has served in various managerial and leadership roles at GC Corp. and its subsidiaries, including as Executive Vice President, and is the current chairman of GC China. Mr. Huh received his B.S. from Yonsei University in Korea and his M.B.A. from the Wisconsin School of Business. Our board of directors believes that Mr. Huh's expertise and leadership experience in the life sciences industry qualify him to serve on our board of directors.

Diego Miralles, M.D., has served as a member of our board of directors since May 2024 and has served as the Chief Executive Officer at AZURNA Therapeutics, Inc., a private pharmaceutical development company, since January 2024. From December 2020 to September 2022, Dr. Miralles served as Chief Executive Officer at Laronde Inc., an early-stage biotechnology company. Dr. Miralles also served as Chief Executive Officer at Vividion, from August 2017 to September 2020. Dr. Miralles has served as a member of the board of directors at Rady Children's Institute for Genomic Medicine since 2008 and served as a member of the board of directors at NeuBase Therapeutics, Inc., a public biopharmaceutical company, from April 2019 to April 2021. Dr. Miralles received his M.D. degree from the University of Buenos Aires. Our board of directors believes that Dr. Miralles's executive-level management experience in the life sciences industry qualifies him to serve on our board of directors.

James Park, has served as a member of our board of directors since January 2023 and has served as President and Chief Executive Officer of GC Cell Corporation (GC Cell), a Korean public biotechnology company, since January 2023, as well as a member of their board of directors since March 2023. Mr. Park also has served as Interim Chief Executive Officer of BioCentriq, a private contract development and manufacturing organization, since June 2023. Previously, Mr. Park held various roles at Samsung Biologics Co., Ltd., including serving as Executive Vice President, Chief Business Officer, from January 2022 to January 2023, Senior Vice President, Chief Business Officer, from March 2018 to December 2021, and Vice President, Global Business Development from November 2015 to February 2018. Prior to joining Samsung Biologics Co., Ltd. in 2015, Mr. Park was Director, Strategy & Alliance Integration for Bristol-Myers Squibb. Mr. Park received his B.S. in Chemical Engineering from the University of California, Davis, and his M.S. in Industrial Engineering & Operations Research from Columbia University. Our board of directors believes that Mr. Park's extensive business and executive-level management experience in the biotechnology industry qualifies him to serve on our board of directors.

[Table of Contents](#)

Laura Stoppel, Ph.D., has served as a member of our board of directors since June 2020. Dr. Stoppel is a Principal at RA Capital Management, L.P., a multi-stage investment manager where she has worked since 2016. Dr. Stoppel has served as a member of the board of directors of Acumen Pharmaceuticals, Inc. since November 2020 and has served as a member of the board of directors of a number of private companies. Dr. Stoppel earned her B.A. in Biology and Psychology from Harvard University and her Ph.D. in Neuroscience from the Massachusetts Institute of Technology. Our board of directors believes that Dr. Stoppel's education, expertise and experience in the finance and life sciences industries qualify her to serve on our board of directors.

Yvonne Yamanaka, Ph.D., has served as a member of our board of directors since June 2020. Dr. Yamanaka is currently a Principal at venBio Partners LLC, a life sciences investment firm, which she joined in August 2016. From May 2015 to August 2016, Dr. Yamanaka was an Associate on the venture creation team at Flagship Pioneering, a venture capital firm focused on building innovative life sciences companies. Dr. Yamanaka currently serves on the board of directors of several private biotechnology companies, including Abdera Therapeutics, Axent Biosciences, Eyconis, and ImmPACT Bio. Dr. Yamanaka received her B.S.E. in Biomedical Engineering from Duke University and her Ph.D. in Biological Engineering from the Massachusetts Institute of Technology, and completed a postdoctoral fellowship at EMD (Merck) Serono, a biopharmaceutical company. Our board of directors believes that Dr. Yamanaka's education, expertise and experience in the finance and life sciences industries qualify her to serve on our board of directors.

Family Relationships and Other Arrangements

There are no family relationships among our directors and executive officers. Pursuant to our amended and restated voting agreement, as amended, which will terminate upon the closing of this offering, the following directors were designated as members of our board of directors:

- Dr. Aslan, designated pursuant to his service as our Chief Executive Officer;
- Dr. Daniels, designated by 5AM Ventures VI, L.P.;
- Dr. Yamanaka, designated by venBio Global Strategic Fund III, L.P.;
- Dr. Stoppel, designated by RA Capital Healthcare Fund, L.P., Blackwell Partners LLC – Series A and/or RA Capital Nexus Fund, L.P.;
- Mr. Huh, designated by GC Corp.;
- Mr. Park, designated by GC Cell;
- Dr. Bessen, designated by a majority of the other members of our board of directors;
- Ms. Hougen, designated by a majority of the other members of our board of directors; and
- Dr. Miralles, designated by a majority of the other members of our board of directors.

Board Composition

Our business and affairs are organized under the direction of our board of directors, which currently consists of nine members with one vacancy. Mr. Park and Dr. Yamanaka notified us that they each will resign from our board of directors effective as of immediately prior to the effectiveness of the registration statement of which this prospectus forms a part. The primary responsibilities of our board of directors are to provide oversight, strategic guidance, counseling and direction to our management. Our board of directors meets on a regular basis and on an ad hoc basis as required.

In accordance with the terms of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to and upon the closing of this offering, respectively, we will divide our board of directors into three classes, as follows:

- Class I, which will consist of Yong-Jun Huh and Laura Bessen, M.D., whose terms will expire at our annual meeting of stockholders to be held in 2025;
- Class II, which will consist of Brian Daniels, M.D., Laura Stoppel, Ph.D., and Diego Miralles, M.D. whose terms will expire at our annual meeting of stockholders to be held in 2026; and
- Class III, which will consist of Fred Aslan, M.D. and Elizabeth Hougen, whose terms will expire at our annual meeting of stockholders to be held in 2027.

At each annual meeting of stockholders to be held after the initial classification, the successors to directors whose terms then expire will serve until the third annual meeting following their election and until their successors are duly elected and qualified. The authorized size of our board of directors is currently ten members, and effective as of the closing of this offering, the authorized size of our board will be seven members. The authorized number of directors may be changed only by resolution of our board of directors. Any additional directorships resulting from an increase in the number of directors will be distributed between the three classes so that, as nearly as possible, each class will consist of one-third of the directors. This classification of our board of directors may have the effect of delaying or preventing changes in our control or management. Our directors may be removed for cause by the affirmative vote of the holders of at least 66 2/3% of our voting stock.

Board Leadership Structure

Our board of directors is currently chaired by Dr. Daniels who has authority, among other things, to call and preside over board of directors meetings, to set meeting agendas and to determine materials to be distributed to the board of directors. Accordingly, the Chairperson has substantial ability to shape the work of the board of directors. We believe that separation of the positions of Chairperson and Chief Executive Officer reinforces the independence of the board of directors in its oversight of our business and affairs. In addition, we have a separate chair for each committee of our board of directors. The chair of each committee is expected to report annually to our board of directors on the activities of their committee in fulfilling their responsibilities as detailed in their respective charters or specify any shortcomings should that be the case.

Role of the Board in Risk Oversight

The audit committee of our board of directors is primarily responsible for overseeing our risk management processes on behalf of our board of directors. Going forward, we expect that the audit committee will receive reports from management periodically regarding our assessment of risks. In addition, the audit committee reports regularly to our board of directors, which also considers our risk profile. The audit committee and our board of directors focus on the most significant risks we face and our general risk management strategies. While our board of directors oversees our risk management, management is responsible for day-to-day risk management processes. Our board of directors expects management to consider risk and risk management in each business decision, to proactively develop and monitor risk management strategies and processes for day-to-day activities and to effectively implement risk management strategies adopted by the audit committee and our board of directors. We believe this division of responsibilities is the most effective approach for addressing the risks we face and that our board of directors' leadership structure, which also emphasizes the independence of our board of directors in its oversight of its business and affairs, supports this approach.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee. Our board of directors may establish other committees to facilitate the management of our business. The composition and functions of each committee are described below. Members serve on these committees until their resignation or until otherwise determined by our board of directors. Each committee has adopted a written charter that satisfies the applicable rules and regulations of the Sarbanes-Oxley Act, the SEC and Nasdaq Listing Rules, which we will post on our website, www.artivabio.com, upon the closing of this offering.

Audit Committee

Our audit committee consists of Ms. Hougen, Dr. Daniels, and Dr. Bessen. Our board of directors has determined that each of the members of our audit committee satisfies the Nasdaq and SEC independence requirements. Ms. Hougen serves as the chair of our audit committee. The functions of this committee include, among other things:

- evaluating the performance, independence and qualifications of our independent auditors and determining whether to retain our existing independent auditors or engage new independent auditors;
- reviewing and approving the engagement of our independent auditors to perform audit services and any permissible non-audit services;
- monitoring the rotation of partners of our independent auditors on our engagement team as required by law;

[Table of Contents](#)

- prior to engagement of any independent auditor, and at least annually thereafter, reviewing relationships that may reasonably be thought to bear on their independence, and assessing and otherwise taking the appropriate action to oversee the independence of our independent auditor;
- reviewing our annual and quarterly financial statements and reports, including the disclosures contained under the caption “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and discussing the statements and reports with our independent auditors and management;
- reviewing, with our independent auditors and management, significant issues that arise regarding accounting principles and financial statement presentation and matters concerning the scope, adequacy and effectiveness of our financial controls;
- reviewing with management and our independent auditors any earnings announcements and other public announcements regarding material developments;
- establishing procedures for the receipt, retention and treatment of complaints received by us regarding financial controls, accounting or auditing matters and other matters;
- preparing the report that the SEC requires in our annual proxy statement;
- reviewing and recommending updates to our insider trading policy;
- reviewing and providing oversight of any related-person transactions in accordance with our related-person transaction policy and reviewing and monitoring compliance with legal and regulatory responsibilities, including our code of business conduct and ethics;
- reviewing our major financial, information security and cybersecurity risk exposures, including the guidelines and policies to govern the process by which risk assessment and risk management are implemented;
- reviewing and making recommendations to the full board of directors regarding directors and officers indemnification and insurance matters;
- reviewing on a periodic basis our investment policy and related-person transactions policy; and
- reviewing and evaluating on an annual basis the performance of the audit committee and the audit committee charter.

Our board of directors has determined that Ms. Hougen qualifies as an “audit committee financial expert” within the meaning of SEC regulations and meets the financial sophistication requirements of the Nasdaq Listing Rules. In making this determination, our board has considered prior experience, business acumen and independence. Both our independent registered public accounting firm and management periodically meet privately with our audit committee.

We believe that the composition and functioning of our audit committee complies with all applicable requirements of the Sarbanes-Oxley Act, and all applicable SEC and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Compensation Committee

Our compensation committee consists of Dr. Daniels and Dr. Bessen. Dr. Daniels serves as the chair of our compensation committee. Our board of directors has determined that each of the members of our compensation committee is a non-employee director, as defined in Rule 16b-3 promulgated under the Exchange Act, and satisfies the Nasdaq independence requirements. The functions of this committee include, among other things:

- reviewing, modifying and approving (or if it deems appropriate, making recommendations to the full board of directors regarding) our overall compensation strategy and policies;
- reviewing and approving or, in the case of our chief executive officer’s compensation, making recommendations to the full board of directors regarding the compensation and other terms of employment of our executive officers;
- reviewing and approving (or if it deems it appropriate, making recommendations to the full board of directors regarding) performance goals and objectives relevant to the compensation of our executive officers and assessing their performance against these goals and objectives;
- reviewing and approving (or if it deems it appropriate, making recommendations to the full board of directors regarding) the equity incentive plans, compensation plans and similar programs advisable for us, as well as modifying, amending or terminating existing plans and programs;

[Table of Contents](#)

- evaluating risks associated with our compensation policies and practices and assessing whether risks arising from our compensation policies and practices for our employees are reasonably likely to have a material adverse effect on us;
- overseeing workplace diversity initiatives and progress;
- modifying and overseeing the compensation clawback or similar policies;
- reviewing and making recommendations to the full board of directors regarding the type and amount of compensation to be paid or awarded to our non-employee board members;
- establishing policies with respect to votes by our stockholders to approve executive compensation as required by Section 14A of the Exchange Act and determining our recommendations regarding the frequency of advisory votes on executive compensation, to the extent required by law;
- reviewing and assessing the independence of compensation consultants, legal counsel and other advisors as required by Section 10C of the Exchange Act;
- administering our equity incentive plans;
- establishing policies with respect to equity compensation arrangements;
- reviewing the competitiveness of our executive compensation programs and evaluating the effectiveness of our compensation policy and strategy in achieving expected benefits to us;
- considering questions of possible conflicts of interest of directors as such questions arise;
- reviewing and making recommendations to the full board of directors regarding the terms of any employment agreements, severance arrangements, change in control protections and any other compensatory arrangements for our executive officers;
- reviewing with management and approving our disclosures under the caption “Compensation Discussion and Analysis” in our periodic reports or proxy statements to be filed with the SEC, to the extent such caption is included in any such report or proxy statement;
- reviewing with management and making recommendations to the full board of directors regarding the plans for succession of our chief executive officer and other key executives;
- preparing the report that the SEC requires in our annual proxy statement; and
- reviewing and assessing on an annual basis the performance of the compensation committee and the compensation committee charter.

We believe that the composition and functioning of our compensation committee complies with all applicable requirements of the Sarbanes-Oxley Act, and all applicable SEC and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Dr. Daniels and Dr. Stoppel. Our board of directors has determined that each of the members of this committee satisfies the Nasdaq independence requirements. Dr. Stoppel serves as the chair of our nominating and corporate governance committee. The functions of this committee include, among other things:

- identifying, reviewing and evaluating candidates to serve on our board of directors consistent with criteria approved by our board of directors;
- determining the minimum qualifications for service on our board of directors;
- evaluating director performance on the board and applicable committees of the board and determining whether continued service on our board is appropriate;
- evaluating, nominating and recommending individuals for membership on our board of directors;
- evaluating nominations by stockholders of candidates for election to our board of directors;
- considering and assessing the independence of members of our board of directors;
- reviewing and recommending updates to the list of executive officers who are subject to the reporting requirements of Section 16 of the Exchange Act;
- developing a set of corporate governance policies and principles, periodically reviewing and assessing these policies and principles and their application and recommending to our board of directors any changes to such policies and principles;

[Table of Contents](#)

- overseeing our environmental, social and governance strategies, targets, policies, performance and reporting; and
- reviewing and assessing on an annual basis the performance of the nominating and corporate governance committee and the nominating and corporate governance committee charter.

We believe that the composition and functioning of our nominating and corporate governance committee complies with all applicable requirements of the Sarbanes-Oxley Act, and all applicable SEC and Nasdaq rules and regulations. We intend to comply with future requirements to the extent they become applicable to us.

Compensation Committee Interlocks and Insider Participation

None of our current or former executive officers serve as a member of the compensation committee. None of our officers serve, or have served during the last completed fiscal year, on the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or our compensation committee. For a description of transactions between us and members of our compensation committee and affiliates of such members, please see “Certain Relationships and Related Party Transactions.”

Code of Business Conduct and Ethics

In connection with this offering, we have adopted an amended written code of business conduct and ethics that applies to our directors, officers and employees, including our principal executive officer, principal financial officer, principal accounting officer or controller, or person performing similar functions. Following this offering, a current copy of the code will be available on the Corporate Governance section of our website, www.artivabio.com.

Director Independence

Under Rule 5605(a)(2) of the Nasdaq Listing Rules, independent directors must comprise a majority of our board of directors as a public company within one year of listing.

Our board of directors has undertaken a review of the independence of each director. Based on information provided by each director concerning the director’s background, employment and affiliations, our board of directors has determined that, with the exception of Dr. Aslan, Mr. Huh, Dr. Miralles and Mr. Park, none of our directors have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that all directors are “independent” as that term is defined under the Nasdaq Listing Rules. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each non-employee director, and the transactions involving them described in the section titled “Certain Relationships and Related Party Transactions.”

EXECUTIVE AND DIRECTOR COMPENSATION

Our named executive officers for the year ended December 31, 2023, were:

- Fred Aslan, M.D., President and Chief Executive Officer;
- Jennifer Bush, Chief Operating Officer, Chief Legal Officer, Corporate Secretary and Compliance Officer
- Christopher Horan, Chief Technical Operations Officer;
- Michael E. Faerm, Former Chief Financial Officer; and
- Peter Flynn, Ph.D., Former Chief Operating Officer.

Summary Compensation Table for Fiscal Year Ended December 31, 2023

The following table sets forth information regarding compensation earned with respect to the fiscal year ended December 31, 2023, by our named executive officers.

NAME AND PRINCIPAL POSITION	YEAR	SALARY (\$)	OPTION AWARDS (\$) ⁽¹⁾	NON-EQUITY INCENTIVE PLAN COMPENSATION (\$) ⁽²⁾	ALL OTHER COMPENSATION (\$)	TOTAL (\$)
Fred Aslan, M.D. <i>President and Chief Executive Officer</i>	2023	584,400	190,463	332,670	234 ⁽³⁾	1,107,767
Christopher Horan <i>Chief Technical Operations Officer</i>	2023	450,000	114,661	162,000	234 ⁽³⁾	726,895
Jennifer Bush <i>Chief Operating Officer, Chief Legal Officer, Corporate Secretary and Compliance Officer</i>	2023	445,600	95,513	184,478	234 ⁽³⁾	725,825
Michael E. Faerm ⁽⁴⁾ <i>Former Chief Financial Officer</i>	2023	111,400	532,985	—	327,245 ⁽⁵⁾	971,630
Peter Flynn, Ph.D. ⁽⁶⁾ <i>Former Chief Operating Officer</i>	2023	119,675	263,097	—	379,693 ⁽⁷⁾	762,465

(1) In accordance with SEC rules, this column reflects (i) the aggregate grant date fair value of the equity awards during 2023, (ii) the incremental fair value in connection with the stock option repricing completed in April 2023 of the eligible options held by the named executive officers as of such date of \$190,463, \$61,369, \$80,518 and \$49,645 for Dr. Aslan, Ms. Bush, Mr. Horan and Dr. Flynn, respectively, (iii) the incremental fair value of \$532,985 recognized in connection with satisfaction of the service-based vesting conditions of all of Mr. Faerm's RSUs in connection with his separation and (iv) the incremental fair value of \$213,452 recognized in connection with modification of Dr. Flynn's options for the exercise period extension in connection with his separation (each as described below). These amounts have been computed in accordance with Financial Accounting Standards Board (FASB), Accounting Standards Codification (ASC) Topic 718. As required by SEC rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. Assumptions used in the calculation of these amounts are described in Note 2 to our financial statements included elsewhere in this prospectus. These amounts do not reflect the actual economic value that may be realized by our named executive officers upon vesting or exercise of the stock options or the sale of the common stock underlying such awards.

(2) The amounts disclosed represent performance bonuses earned in 2023 and paid in early 2024. For additional information, please see the subsection titled "— Performance Bonus Opportunity."

(3) The amounts reflect life insurance premiums paid by us for each of our named executive officers.

(4) Mr. Faerm's employment with the Company as Chief Financial Officer was terminated effective March 31, 2023. For more information, see "Employment Arrangements with our Named Executive Officers" below.

(5) Reflects (i) \$222,800 in cash severance, (ii) \$70,479 of accrued PTO, (iii) \$17,257 in COBRA premiums, (iv) \$16,650 in consulting fees and (v) \$58.50 life insurance premiums either paid to or on behalf of Mr. Faerm by us, of which (ii) to (iii) were in connection with his termination.

(6) Dr. Flynn's employment with the Company as Chief Operating Officer was terminated effective March 31, 2023. For more information, see "Employment Arrangements with our Named Executive Officers" below.

(7) Reflects (i) \$239,350 in cash severance, (ii) \$72,032 of accrued PTO, (iii) \$54,000 in consulting fees, (iv) \$14,252 in COBRA premiums and (v) \$58.50 in life insurance premiums either paid to or on behalf of Dr. Flynn by us, of which (ii) to (iv) were in connection with his termination.

Narrative to the Summary Compensation Table

Annual Base Salary

The 2023 annual base salary rates for our named executive officers are set forth in the table below.

NAME	2023 BASE SALARY
Fred Aslan, M.D.	\$ 584,400
Christopher Horan	\$ 450,000
Jennifer Bush	\$ 445,600
Michael E. Faerm	\$ 445,600
Peter Flynn, Ph.D.	\$ 478,700

In January 2024, the Compensation Committee of the Board approved annual base salaries, to be effective January 1, 2024, of \$607,776, \$463,424, and \$465,750 for Dr. Aslan, Ms. Bush and Mr. Horan, respectively.

Performance Bonus Opportunity

In addition to base salaries, our named executive officers are eligible to receive annual performance-based cash bonuses, which are designed to provide appropriate incentives to our executives to achieve defined annual corporate goals and to reward our executives for individual achievement towards these goals. The annual performance-based bonus each named executive officer is eligible to receive is generally based on the extent to which we achieve the corporate goals that our board of directors establishes each year. At the end of the year, our board of directors reviews our performance against each corporate goal and determines the extent to which we achieved each of our corporate goals.

Our board of directors will generally consider each named executive officer's individual contributions towards reaching our annual corporate goals. For 2023, Dr. Aslan's target bonus was 55% of his then-current base salary, and for each of our other named executive officers, 40% of their then-current base salary.

The corporate goals the board of directors established for 2023 related to product development milestones, business development objectives and financing objectives. In January 2024, our board of directors determined that the 2023 corporate goals were achieved at a 90% level. Our board of directors also assessed the performance of each executive and applied an individual performance multiplier to the corporate goal achievement. For Dr. Aslan and Ms. Bush, such individual performance multiplier was 115% due to their exceptional performance in 2023, yielding a total payout of 103.5% of their target bonuses. For Mr. Horan, such individual performance multiplier was 100%, yielding a total payout of 90% of his target bonus. Mr. Faerm and Dr. Flynn were not entitled to receive an annual bonus for 2023 pursuant to the terms of their respective separation agreements.

Equity-Based Incentive Awards

Our equity-based incentive awards are designed to align our interests and those of our stockholders with those of our employees, including our executive officers. The board of directors or an authorized committee thereof is responsible for approving equity grants.

Prior to this offering, we have granted stock options and restricted stock units pursuant to our 2020 Equity Incentive Plan (the 2020 Plan) to certain of our executives. Following this offering, we will grant equity awards under the terms of our 2024 Equity Incentive Plan (the 2024 Plan). The terms of our equity plans are described below under the subsection titled "—Equity Incentive Plans."

In May 2023, our board of directors granted options under our 2020 Plan to purchase 40,000 shares to each of Ms. Bush and Mr. Horan. Each option has an exercise price of \$1.14 per share, which was the fair market value per share of our common stock on the date of grant, as determined by our Board, and vests in a series of 48 successive equal monthly installments after the vesting commencement date, subject to the respective named executive officer's continuous service with us as of each such vesting date.

[Table of Contents](#)

Stock options and restricted stock units granted to our named executive officers are subject to potential acceleration of vesting in connection with a change of control, as described below under “Potential Payments Upon Termination or Change in Control.”

In January 2024, our board of directors granted options under our 2020 Plan to purchase 116,011 shares to Dr. Aslan and 62,293 shares to Ms. Bush. Each option has an exercise price of \$1.18 per share, which was the fair market value per share of our common stock on the date of grant, as determined by our Board, and vests in a series of 48 successive equal monthly installments after the vesting commencement date, subject to the respective named executive officer's continuous service with us as of each such vesting date.

In May 2024, our compensation committee of the board of directors granted options under our 2020 Plan to purchase 500,000 shares to Dr. Aslan and 90,000 shares to each of Ms. Bush and Mr. Horan. Each option has an exercise price of \$3.07 per share, which was the fair market value per share of our common stock on the date of grant, as determined by our compensation committee, and one-fourth of the shares shall vest on the first anniversary of the date our common stock is listed on a national securities exchange upon our initial public offering, and thereafter a series of 36 successive equal monthly installments, subject to the respective named executive officer's continuous service with us as of each such vesting date.

Repricing and Extended Post-Termination Exercise Period

In April 2023, we repriced certain outstanding options, including options held by Dr. Aslan, Ms. Bush and Mr. Horan. The amendment reduced the exercise price per share of such options to \$1.14, the fair market value of our common stock as determined by our board of directors on the date of the repricing. We believe that repricing these underwater options was important for the growth and development of our business in order to provide appropriate retention and motivation incentives for our employees holding these options.

Also in April 2023, we amended certain outstanding options, including options held by Dr. Aslan, Ms. Bush and Mr. Horan, to extend the post-termination exercise period for all options held by our named executive officers, such that if the executive remains an employee of the Company through December 31, 2024, the exercise period for options vested as of the date of termination of the executive's employment will be extended until the date that is three years from the termination; provided that, in the event a “conflict” arises during the extended exercise period, the extended exercise period will terminate on the date that is 90 days from the occurrence of the “conflict.” A “conflict” will be deemed to have occurred if the executive manages, operates, joins, controls or participates in the ownership, management, operation or control of, or is connected to as an employee, shareholder, director, manager, member, consultant, adviser, volunteer, partner or otherwise, whether for compensation or not, any entity that engages in the research, development, manufacturing, production, marketing or sale of cellular immunotherapies (i) utilizing natural killer cells, or (ii) a non-NK cell therapy being developed for lymphomas (including Hodgkin's and non-Hodgkin's lymphoma). This extended post-termination exercise period will also apply to any options granted to the executives following April 2023 that are vested and outstanding as of the executive's termination. We believe that this extension of the post-termination exercise period will provide a retention incentive for our executives.

All the other terms of such options remained the same, including the number of shares granted, vesting schedule and expiration date.

Outstanding Equity Awards as of December 31, 2023

The following table sets forth certain information about outstanding equity awards granted to our named executive officers that remain outstanding as of December 31, 2023. The option awards set forth below are subject to acceleration of vesting as described in more detail below under the subsection titled “—Potential Payments upon Termination or Change in Control.”

NAME	GRANT DATE	OPTION AWARDS ⁽¹⁾				STOCK AWARDS ⁽¹⁾	
		NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS VESTED	NUMBER OF SECURITIES UNDERLYING UNEXERCISED OPTIONS UNVESTED	OPTION EXERCISE PRICE ⁽²⁾	OPTION EXPIRATION DATE	NUMBER OF SHARES OR UNITS OF STOCK THAT HAVE NOT VESTED	MARKET VALUE OF SHARES OF UNITS OF STOCK THAT HAVE NOT VESTED
Fred Aslan, M.D.	12/18/2020 ⁽³⁾	822,939	305,664	\$ 1.14	12/17/2030	—	—
	12/18/2020 ⁽⁴⁾	159,885	65,835	\$ 1.14	12/17/2030	—	—
	2/24/2021 ⁽⁴⁾	312,468	128,664	\$ 1.14	2/23/2031	—	—
Christopher Horan	2/2/2022 ⁽⁵⁾	170,000	170,000	\$ 1.14	2/1/2032	—	—
	5/24/2023 ⁽⁶⁾	5,833	34,167	\$ 1.14	5/23/2033	—	—
Jennifer Bush	2/24/2021 ⁽⁴⁾	127,500	52,500	\$ 1.14	2/23/2031	—	—
	5/24/2023 ⁽⁶⁾	5,833	34,167	\$ 1.14	5/23/2033	—	—
Michael Faerm	4/5/2021 ⁽⁷⁾	—	—	—	—	89,773	\$ 105,932 ⁽⁸⁾
	4/20/2022 ⁽⁷⁾	—	—	—	—	8,977	\$ 10,593 ⁽⁸⁾
Peter Flynn, Ph.D.	6/26/2020 ⁽⁹⁾	165,000	—	\$ 1.14	6/25/2030	—	—
	12/18/2020 ⁽¹⁰⁾	183,750	26,250	\$ 1.14	12/17/2030	—	—
	2/24/2021 ⁽¹¹⁾	119,708	49,292	\$ 1.14	2/23/2031	—	—

- ⁽¹⁾ All of the option awards and RSUs were granted under the 2020 Plan, the terms of which plan is described below under “—Equity Incentive Plans—2020 Equity Incentive Plan.”
- ⁽²⁾ Reflects the option exercise price per share as of December 31, 2023. Each of Dr. Aslan's, Ms. Bush's, Mr. Horan's and Dr. Flynn's options were amended in April 2023 to reduce the exercise price per share to \$1.14, as described above under “Equity-Based Incentive Awards—Repricing.”
- ⁽³⁾ One-fourth of the shares subject to the option award vested on January 1, 2022, and thereafter 1/48th of the shares subject to the option award vest on each monthly anniversary thereof, subject to continuous service with the Company through each such vesting date.
- ⁽⁴⁾ One-fourth of the shares subject to the option award vested on February 22, 2022, and thereafter 1/48th of the shares subject to the option award vest on each monthly anniversary thereof, subject to continuous service with the Company through each such vesting date.
- ⁽⁵⁾ One-fourth of the shares subject to the option award vested on December 31, 2022, and thereafter 1/48th of the shares subject to the option award vest on each monthly anniversary thereof, subject to continuous service with the Company through each such vesting date.
- ⁽⁶⁾ The shares subject to the option award vest in 48 equal monthly installments measured from May 24, 2023, subject to continuous service with the Company through each such vesting date.
- ⁽⁷⁾ The shares subject to this RSU award shall vest in full upon the occurrence of a Liquidity Event (as defined below) on or prior to April 4, 2028.
- ⁽⁸⁾ This amount reflects the fair market value of our common stock of \$1.18 per share as of December 31, 2023 (the determination of the fair market value by our board of directors as of the most proximate date) multiplied by the amount shown in the column for the number of shares that have not vested.
- ⁽⁹⁾ One-fourth of the shares subject to the option award vested on June 26, 2021, and thereafter 1/48th of the shares subject to the option award vest on each monthly anniversary, subject to continuous service with the Company through each such vesting date and such additional vesting as may result due to termination of his separation agreement prior to the first anniversary thereof, as described below. The option is also subject to early exercise and is fully exercisable as of the grant date.
- ⁽¹⁰⁾ One-fourth of the shares subject to the option award vested on June 25, 2021, and thereafter 1/48th of the shares subject to the option award vest on each monthly anniversary, subject to continuous service with the Company through each such vesting date and such additional vesting as may result due to termination of his separation agreement prior to the first anniversary thereof, as described below.
- ⁽¹¹⁾ One-fourth of the shares subject to the option award vested on February 22, 2022, and thereafter 1/48th of the shares subject to the option award on each monthly anniversary, subject to continuous service with the Company through each such vesting date and such additional vesting as may result due to termination of his separation agreement prior to the first anniversary thereof, as described below.

Employment Arrangements with our Named Executive Officers

Below are descriptions of our employment agreements and offer letters with our named executive officers. The employment of each of our named executive officers is at will. Each of the named executive officers, except for Mr. Faerm and Dr. Flynn, entered into letter agreements to amend the exercise period of their options, see the subsection titled “—Repricing and Extended Post-Termination Exercise Period” above. For a discussion of the severance pay and other benefits to be provided in connection with a termination of employment and/or a change in control under the arrangements with our named executive officers, see the subsection titled “—Potential Payments upon Termination or Change in Control” below.

Dr. Aslan. We entered into an offer letter with Dr. Aslan on December 14, 2020, which was subsequently amended in April 2021, which governs the terms of his employment with us. Pursuant to his offer letter, Dr. Aslan was originally entitled to an initial base salary of \$480,000, which was most recently increased in January 2024 by the Compensation Committee of the Board to \$607,776, effective as of January 1, 2024. Pursuant to the terms of his amended offer letter, Dr. Aslan was also eligible to receive an annual discretionary bonus at a target amount of 50% of his then current annual base salary, which the Compensation Committee of the Board increased to a target amount of 55% effective as of January 1, 2022 based on the achievement of performance targets and metrics, as determined by our board of directors. In addition, pursuant to the offer letter, Dr. Aslan was granted (i) an option to purchase 1,128,603 shares of our common stock (the Initial Option Grant), and (ii) an option to purchase 225,720 shares of our common stock (the Performance Option), the terms of which are set forth in the Outstanding Equity Awards table. In addition to the Initial Option Grant and Performance Option, at the closing of any future private preferred stock equity rounds of financing by the company prior to an initial public offering of our common stock on a national securities exchange, subject to board approval, Dr. Aslan's offer letter provides for additional options (or restricted stock awards) to enable Dr. Aslan to maintain a 5% equity interest in our company (collectively with the Initial Option Grant and the Performance Option, the Initial Options). In addition to the Initial Options, upon the consummation of an initial public offering of our stock on a national securities exchange, subject to board approval, Dr. Aslan's offer letter provides for an additional option to enable him to maintain on a fully diluted basis a 4.5% equity interest in the company (the IPO Grant), which the company expects to grant in connection with this offering. Dr. Aslan's offer letter also provides for severance benefits upon an involuntary termination, as described below under “—Potential Payments upon Termination or Change in Control.”

Ms. Bush. We entered into an offer letter with Ms. Bush effective as of August 2020, which was subsequently amended in April 2021, which governs the terms of her employment with us. Pursuant to her offer letter, Ms. Bush was entitled to an initial annual base salary of \$350,000, which was most recently increased in January 2024 by the Compensation Committee of the Board to \$463,424, effective as of January 1, 2024. Ms. Bush was also eligible to receive an annual discretionary bonus at a target amount of 30% of her annual base salary, which the Compensation Committee of the Board increased to a target amount of 40% effective as of January 1, 2022, based on the achievement of individual and corporate performance targets and metrics, as determined by our board of directors. In addition, pursuant to her offer letter, Ms. Bush was granted an option to purchase 100,000 shares of our common stock, the terms of which are set forth in the Outstanding Equity Awards table. Ms. Bush's offer letter also provides for severance benefits upon an involuntary termination, as described below under “—Potential Payments upon Termination or Change in Control.”

Mr. Horan. We entered into an offer letter with Mr. Horan effective as of December 2021, which governs the terms of his employment with us. Pursuant to his offer letter, Mr. Horan was entitled to an initial annual base salary of \$400,000, which was most recently increased in January 2024 by the Compensation Committee of the Board to \$465,750, effective as of January 1, 2024. Mr. Horan was also eligible to receive an annual discretionary bonus at a target amount of 30% of his annual base salary, which the Compensation Committee of the Board increased to a target amount of 40% effective as of January 1, 2022, based on the achievement of individual and corporate performance targets and metrics, as determined by our board of directors. Mr. Horan's offer letter also provides for a \$100,000 signing bonus, which was subject to a right of repayment in favor of the Company through the 12-month anniversary of his December 31, 2021 start date, and thereafter subject to a prorated right of repayment in favor of the Company through the 24-month anniversary of his start date. In addition, pursuant to his offer letter, Mr. Horan was granted an option to purchase 340,000 shares of our common stock as described above under “—Equity-Based

[Table of Contents](#)

Incentive Awards.” Mr. Horan’s offer letter also provides for severance benefits upon an involuntary termination, as described below under “—Potential Payments upon Termination or Change in Control.”

Mr. Faerm. We entered into an offer letter with Mr. Faerm effective as of April 2021, which governed the terms of his employment with us. Pursuant to his offer letter, Mr. Faerm was entitled to an initial annual base salary of \$350,000. In January 2022, the Compensation Committee of the Board approved an increase in Mr. Faerm’s annual base salary to \$445,600, effective as of January 1, 2022. Mr. Faerm was also eligible to receive an annual discretionary bonus at a target amount of 30% of his annual base salary, which the Compensation Committee of the Board increased to a target amount of 40% effective as of January 1, 2022, based on the achievement of individual and corporate performance targets and metrics, as determined by our board of directors. In addition, pursuant to his offer letter, Mr. Faerm was granted (i) an option to purchase 359,091 shares of our common stock and (ii) 89,773 restricted stock units. Further, pursuant to the terms of his offer letter, Mr. Faerm received a relocation bonus of \$100,000 in connection with his relocation to San Diego, California, which was paid in April 2021. In March 2023, we entered into a separation agreement and release with Mr. Faerm as described below under “—Potential Payments upon Termination or Change in Control.” Pursuant to the separation agreement, Mr. Faerm’s employment with us terminated on March 31, 2023.

Dr. Flynn. We entered into an offer letter with Dr. Flynn in March 2019, which was subsequently amended in May 2019, March 2020, and April 2021, and which governed the terms of his employment with us. In January, 2022, the Compensation Committee of the Board approved an increase in Dr. Flynn’s annual base salary to \$478,700, effective as of January 1, 2022. He was also eligible to receive an annual discretionary bonus at a target amount of 30% of his then current annual base salary, which the Compensation Committee of the Board increased to a target amount of 40% effective as of January 1, 2022, based on the achievement of individual and corporate performance targets and metrics, as determined by our board of directors. In addition, pursuant to the offer letter, Dr. Flynn was granted the right to purchase 90,000 founders shares of our common stock, which are subject to a repurchase option in favor of the Company which lapses over a period of four years, and Dr. Flynn was also granted a stock option to purchase 250,000 shares in connection with the closing of our Series A Preferred Stock financing in June 2020, as described above under “—Equity-Based Incentive Awards”. In March 2023, we entered into a separation agreement and release with Dr. Flynn as described further below under “—Potential Payments upon Termination or Change in Control.” Pursuant to the separation agreement, Dr. Flynn’s employment with us terminated on March 31, 2023.

Potential Payments Upon Termination or Change in Control

Regardless of the manner in which a named executive officer’s service terminates, each named executive officer is entitled to receive amounts previously earned during his term of service, including unpaid salary and cash out of unused vacation. In addition, our named executive officers are entitled to certain severance benefits under their executive employment agreements or offer letters, subject to their execution of a release of claims, return of all company property, compliance with post-termination obligations and resignation from all positions with us.

Pursuant to the terms of Dr. Aslan’s offer letter, as amended, if we terminate his employment without cause (other than as a result of death or disability) or he resigns for good reason (each, as defined in his amended offer letter), Dr. Aslan will be entitled to receive, subject to his execution and non-revocation of a general release in favor of us, (i) continued payment of his then-current base salary for 12 months, (ii) premiums for COBRA continuation coverage for up to 12 months, and (iii) accelerated vesting of all outstanding and unvested service-based equity awards as if he had completed an additional six months of service with the Company. In addition, if Dr. Aslan is terminated without cause (other than as a result of death or disability) or resigns for good reason, in each case within three months prior to, or twelve months after a change of control (each, as defined in his amended offer letter) then Dr. Aslan will be entitled to receive (1) continued payment of his then-current base salary for 18 months, (2) premiums for COBRA continuation of coverage for up to 18 months, (3) accelerated vesting of all outstanding and unvested service-based equity awards, and (4) his full target annual bonus for the fiscal year in which his employment is terminated.

Pursuant to the terms of Ms. Bush’s offer letter, as amended, if we terminate her employment without cause (other than as a result of death or disability) or if Ms. Bush resigns for good reason (each as defined in her amended offer letter), Ms. Bush will be entitled to receive, subject to her execution and non-revocation of a general release in favor

[Table of Contents](#)

of us, (i) continued payment of her then-current base salary for nine months, (ii) premiums for COBRA continuation coverage for up to nine months, and (iii) accelerated vesting of all outstanding and unvested service-based equity awards as if she had completed an additional three months of service with the Company. In addition, if Ms. Bush is terminated without cause (other than as a result of death or disability) or resigns for good reason, in each case within three months prior to, or twelve months after a change of control (each, as defined in the amended offer letter) then Ms. Bush will be entitled to receive (1) continued payment of her then-current base salary for 12 months, (2) premiums for COBRA continuation of coverage for up to 12 months, (3) her full target annual bonus for the fiscal year in which her employment is terminated, and (4) accelerated vesting of all outstanding and unvested service-based equity awards.

Pursuant to the terms of Mr. Horan's offer letter, prior to the completion of this offering, if we terminate Mr. Horan without cause (other than as a result of death or disability) (as defined in Mr. Horan's offer letter), then Mr. Horan will be entitled to receive, subject to his execution and non-revocation of a general release in favor of us, (i) continued payment of his then-current base salary for six months and (ii) premiums for COBRA continuation of coverage for up to six months. In addition, following the completion of this offering, if we terminate Mr. Horan without cause (other than as a result of death or disability) or he resigns for good reason (each as defined in Mr. Horan's offer letter), Mr. Horan will be eligible to receive (1) continued payment of his then-current base salary for nine months, (2) premiums for COBRA continuation of coverage for up to nine months, and (3) accelerated vesting of all outstanding and unvested service-based equity awards as if he had completed an additional three months of service with the Company. In addition, if Mr. Horan is terminated without cause (other than as a result of death or disability) or resigns for good reason, in each case within three months prior to, or twelve months after a change of control (each, as defined in the offer letter) following the closing of this offering, then Mr. Horan will be entitled to receive (1) continued payment of his then-current base salary for 12 months, (2) premiums for COBRA continuation of coverage for up to 12 months, (3) his full target annual bonus for the fiscal year in which his employment is terminated, and (4) accelerated vesting of all outstanding and unvested service-based equity awards.

In March 2023, we entered into a separation agreement and release with Mr. Faerm (the Faerm Separation Agreement), pursuant to which his employment with the Company terminated effective March 31, 2023. In addition, pursuant to the Faerm Separation Agreement, Mr. Faerm received (i) a one-time lump sum payment in the amount of \$222,800, (ii) up to six months of COBRA premiums and (iii) subject to his entry into a consulting agreement, the satisfaction of the service-based vesting conditions of all of his RSUs. In addition, upon the occurrence of a Liquidity Event (which includes the date of the final prospectus related to this offering) on or prior to April 4, 2028.

Effective as of April 3, 2023, we entered into a consulting agreement with Mr. Faerm pursuant to which, for a period of six months, Mr. Faerm provided consulting services at a rate of \$450 per hour for a maximum of eight hours per week. On October 3, 2023, the consulting agreement was extended to December 31, 2023.

In March 2023, we entered into a separation agreement and release with Dr. Flynn (the Flynn Separation Agreement), pursuant to which his employment with the Company terminated effective March 31, 2023. In addition, pursuant to the Flynn Separation Agreement, Dr. Flynn received (i) a one-time lump sum payment equivalent to six months' base salary in the amount of \$239,350, (ii) up to six months of COBRA premiums and (iii) subject to his entry into a consulting agreement, continued vesting of his outstanding options through the term of his consulting agreement. Furthermore, if we terminate the consulting agreement for convenience prior to 12 months from the effective date (the First Anniversary), the vesting of any outstanding awards will continue until the earlier of the First Anniversary or the occurrence of a "conflict" (as defined above). Additionally, in the event that we reprice option grants for current employees during the term of the consulting agreement, or if later, by the First Anniversary, all of his outstanding options will also be subject to such repricing, with no other changes to the option agreements. As an additional severance benefit, the exercise period for all of Dr. Flynn's vested options will be extended until the date that is 3 years from the termination of the consulting agreement; provided that in the event a "conflict" arises during the extended exercise period, the extended exercise period will end and Dr. Flynn must exercise any vested options within 90 days of the occurrence of the "conflict".

[Table of Contents](#)

Pursuant to such consulting agreement, entered into effective as of March 31, 2023 and as amended effective as of September 1, 2023, Dr. Flynn provides consulting services to us at a rate of \$500 per hour. The consulting agreement will continue unless terminated by either us or Dr. Flynn, which termination may be effected by either party upon 30 days' prior written notice.

Each of our named executive officers' stock options granted prior to execution of the underwriting agreement for this offering are subject to the terms of the 2020 Plan. A description of the termination and change in control provisions in the 2020 Plan and the form of stock options granted thereunder is provided below under "—Equity Incentive Plans."

Health and Welfare and Retirement Benefits; Perquisites

All of our current named executive officers are eligible to participate in our employee benefit plans, including our medical, dental, vision, disability and life insurance plans, in each case on the same basis as all of our other employees. We generally do not provide perquisites or personal benefits to our named executive officers, except in limited circumstances.

401(k) Plan

Our named executive officers are eligible to participate in a defined contribution retirement plan that provides eligible employees with an opportunity to save for retirement on a tax advantaged basis. Eligible employees may defer eligible compensation on a pre-tax or after-tax (Roth) basis, up to the statutorily prescribed annual limits on contributions under the Internal Revenue Code of 1986, as amended (the Code). Contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participants' directions. The 401(k) plan is intended to be qualified under Section 401(a) of the Code with the 401(k) plan's related trust intended to be tax exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan (except for Roth contributions) and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan. Our board of directors may elect to adopt qualified or nonqualified benefit plans in the future, if it determines that doing so is in our best interests.

Equity Incentive Plans

The principal features of our equity incentive plans are summarized below. These summaries are qualified in their entirety by reference to the actual text of the applicable plan, each of which is filed as an exhibit to the registration statement of which this prospectus is a part.

2024 Equity Incentive Plan

Our board of directors adopted our 2024 Plan in _____ 2024 and our stockholders approved our 2024 Plan in _____ 2024. Our 2024 Plan provides for the grant of incentive stock options (ISOs) to employees, including employees of any parent or subsidiary, and for the grant of non-statutory stock options (NSOs), stock appreciation rights, restricted stock awards, restricted stock unit awards, performance awards and other forms of stock awards to employees, directors, and consultants, including employees and consultants of our affiliates. Our 2024 Plan is a successor to and continuation of our 2020 Plan (referred to in the 2024 Plan as our Prior Plan) and will become effective on the execution of the underwriting agreement related to this offering.

Authorized Shares. Initially, the maximum number of shares of our common stock that may be issued under our 2024 Plan after it becomes effective will not exceed _____ shares of our common stock, which is the sum of (1) _____ new shares of our common stock, plus (2) up to _____ of shares of our common stock subject to outstanding stock awards granted under our 2020 Plan that, on or after the 2024 Plan becomes effective, expire or otherwise terminate prior to exercise or settlement; are not issued because the stock award is settled in cash; are forfeited or repurchased because of the failure to vest; or are reacquired or withheld to satisfy a tax withholding obligation or the purchase or exercise price, if any, as such shares become available from time to time. In addition, the number of shares of our common stock reserved for issuance under our 2024 Plan will automatically increase on January 1 of each year, starting on January 1, 2025, through and including January 1, 2034, in an amount equal to (1) 5% of the total number of shares of our common stock outstanding on the last day of the preceding calendar year, or (2) a lesser number of shares of our common stock determined by our board of directors prior to the date of the increase. The maximum number of shares of our common stock that may be issued upon the exercise of ISOs under our 2024 Plan is _____ shares.

[Table of Contents](#)

Shares subject to stock awards granted under our 2024 Plan that expire or terminate without being exercised or otherwise issued in full or that are paid out in cash rather than in shares do not reduce the number of shares available for issuance under our 2024 Plan. Shares withheld under a stock award to satisfy the exercise, strike or purchase price of a stock award or to satisfy a tax withholding obligation do not reduce the number of shares available for issuance under our 2024 Plan. If any shares of our common stock issued pursuant to a stock award are forfeited back to or repurchased or reacquired by us (1) because of the failure to vest, (2) to satisfy the exercise, strike or purchase price, or (3) to satisfy a tax withholding obligation in connection with an award, the shares that are forfeited or repurchased or reacquired will revert to and again become available for issuance under the 2024 Plan.

Plan Administration. Our board of directors, or a duly authorized committee of our board of directors, will administer our 2024 Plan and is referred to as the “plan administrator” herein. Our board of directors may also delegate to one or more persons or bodies the authority to (1) designate recipients (other than officers) to receive specified stock awards; (2) determine the number of shares subject to such stock awards; and (3) determine the terms of such awards. Under our 2024 Plan, our board of directors has the authority to determine award recipients, grant dates, the numbers and types of stock awards to be granted, the applicable fair market value, and the provisions of each stock award, including the period of exercisability and the vesting schedule applicable to a stock award.

Under the 2024 Plan, the board of directors also generally has the authority to effect, with the consent of any materially adversely affected participant, (1) the reduction of the exercise, purchase, or strike price of any outstanding option or stock appreciation right; (2) the cancellation of any outstanding option or stock appreciation right and the grant in substitution therefore of other awards, cash, or other consideration; or (3) any other action that is treated as a repricing under generally accepted accounting principles.

Stock Options. ISOs and NSOs are granted under stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for stock options, within the terms and conditions of the 2024 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant. Options granted under the 2024 Plan vest at the rate specified in the stock option agreement as determined by the plan administrator.

The plan administrator determines the term of stock options granted under the 2024 Plan, up to a maximum of 10 years. Unless the terms of an optionholder’s stock option agreement provide otherwise, if an optionholder’s service relationship with us or any of our affiliates ceases for any reason other than disability, death, or cause, the optionholder may generally exercise any vested options for a period of three months following the cessation of service. This period may be extended in the event that exercise of the option is prohibited by applicable securities laws. If an optionholder’s service relationship with us or any of our affiliates ceases due to death, or an optionholder dies within a certain period following cessation of service, the optionholder or a beneficiary may generally exercise any vested options for a period of 18 months following the date of death. If an optionholder’s service relationship with us or any of our affiliates ceases due to disability, the optionholder may generally exercise any vested options for a period of 12 months following the cessation of service. In the event of a termination for cause, options generally terminate upon the termination date. In no event may an option be exercised beyond the expiration of its term.

Acceptable consideration for the purchase of our common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft or money order, (2) a broker-assisted cashless exercise, (3) the tender of shares of our common stock previously owned by the optionholder, (4) a net exercise of the option if it is an NSO, or (5) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options and stock appreciation rights generally are not transferable except by will or the laws of descent and distribution. Subject to approval of the plan administrator or a duly authorized officer, an option may be transferred pursuant to a domestic relations order, official marital settlement agreement, or other divorce or separation instrument.

Tax Limitations on ISOs. The aggregate fair market value, determined at the time of grant, of our common stock with respect to ISOs that are exercisable for the first time by an award holder during any calendar year under all of our stock plans may not exceed \$100,000. Options or portions thereof that exceed such limit will generally be treated as

[Table of Contents](#)

NSOs. No ISO may be granted to any person who, at the time of the grant, owns or is deemed to own stock possessing more than 10% of our total combined voting power or that of any of our parent or subsidiary corporations unless (1) the option exercise price is at least 110% of the fair market value of the stock subject to the option on the date of grant, and (2) the term of the ISO does not exceed five years from the date of grant.

Restricted Stock Unit Awards. Restricted stock unit awards are granted under restricted stock unit award agreements adopted by the plan administrator. Restricted stock unit awards may be granted in consideration for any form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. A restricted stock unit award may be settled by cash, delivery of shares of our common stock, a combination of cash and shares of our common stock as determined by the plan administrator, or in any other form of consideration set forth in the restricted stock unit award agreement. Additionally, dividend equivalents may be credited in respect of shares covered by a restricted stock unit award. Except as otherwise provided in the applicable award agreement, restricted stock unit awards that have not vested will be forfeited once the participant's continuous service ends for any reason.

Restricted Stock Awards. Restricted stock awards are granted under restricted stock award agreements adopted by the plan administrator. A restricted stock award may be awarded in consideration for cash, check, bank draft or money order, past services to us, or any other form of legal consideration that may be acceptable to our board of directors and permissible under applicable law. The plan administrator determines the terms and conditions of restricted stock awards, including vesting and forfeiture terms. If a participant's service relationship with us ends for any reason, we may receive any or all of the shares of common stock held by the participant that have not vested as of the date the participant terminates service with us through a forfeiture condition or a repurchase right.

Stock Appreciation Rights. Stock appreciation rights are granted under stock appreciation right agreements adopted by the plan administrator. The plan administrator determines the strike price for a stock appreciation right, which generally cannot be less than 100% of the fair market value of our common stock on the date of grant. A stock appreciation right granted under the 2024 Plan vests at the rate specified in the stock appreciation right agreement as determined by the plan administrator. Stock appreciation rights may be settled in cash or shares of our common stock or in any other form of payment, as determined by our board of directors and specified in the stock appreciation right agreement.

The plan administrator determines the term of stock appreciation rights granted under the 2024 Plan, up to a maximum of 10 years. If a participant's service relationship with us or any of our affiliates ceases for any reason other than cause, disability, or death, the participant may generally exercise any vested stock appreciation right for a period of three months following the cessation of service. This period may be further extended in the event that exercise of the stock appreciation right following such a termination of service is prohibited by applicable securities laws. If a participant's service relationship with us, or any of our affiliates, ceases due to disability or death, or a participant dies within a certain period following cessation of service, the participant or a beneficiary may generally exercise any vested stock appreciation right for a period of 12 months in the event of disability and 18 months in the event of death. In the event of a termination for cause, stock appreciation rights generally terminate immediately upon the occurrence of the event giving rise to the termination of the individual for cause. In no event may a stock appreciation right be exercised beyond the expiration of its term.

Performance Awards. The 2024 Plan permits the grant of performance awards that may be settled in stock, cash or other property. Performance awards may be structured so that the stock or cash will be issued or paid only following the achievement of certain pre-established performance goals during a designated performance period. Performance awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, our common stock.

The performance goals may be based on any measure of performance selected by our board of directors. The performance goals may be based on company-wide performance or performance of one or more business units, divisions, affiliates, or business segments, and may be either absolute or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by our board of directors when the performance award is granted, our board of directors will appropriately make adjustments in the method of calculating the attainment of performance goals as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally

[Table of Contents](#)

accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that are “unusual” in nature or occur “infrequently” as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any portion of our business which is divested achieved performance objectives at targeted levels during the balance of a performance period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of our common stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under our bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles.

Other Stock Awards. The plan administrator may grant other awards based in whole or in part by reference to our common stock. The plan administrator will set the number of shares under the stock award (or cash equivalent) and all other terms and conditions of such awards.

Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid to any non-employee director with respect to any calendar year that begins on or after the effective date of this offering, including awards granted and cash fees paid by us to such non-employee director, will not exceed (1) \$750,000 in total value or (2) if such non-employee director is first appointed or elected to our board of directors during such calendar year, \$1,000,000 in total value.

Changes to Capital Structure. In the event there is a specified type of change in our capital structure, such as a stock split, reverse stock split, or recapitalization, appropriate adjustments will be made to (1) the class and maximum number of shares reserved for issuance under the 2024 Plan, (2) the class and maximum number of shares by which the share reserve may increase automatically each year, (3) the class and maximum number of shares that may be issued on the exercise of ISOs, and (4) the class and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards.

Corporate Transactions. The following applies to stock awards under the 2024 Plan in the event of a corporate transaction (as defined in the 2024 Plan), unless otherwise provided in a participant’s stock award agreement or other written agreement with us or one of our affiliates or unless otherwise expressly provided by the plan administrator at the time of grant.

In the event of a corporate transaction, any stock awards outstanding under the 2024 Plan may be assumed, continued or substituted for by any surviving or acquiring corporation (or its parent company), and any reacquisition or repurchase rights held by us with respect to the stock award may be assigned to our successor (or its parent company). If the surviving or acquiring corporation (or its parent company) does not assume, continue or substitute for such stock awards, then (i) with respect to any such stock awards that are held by participants whose continuous service has not terminated prior to the effective time of the corporate transaction, or current participants, the vesting (and exercisability, if applicable) of such stock awards will be accelerated in full (or, in the case of performance awards with multiple vesting levels depending on the level of performance, vesting will accelerate at 100% of the target level) to a date prior to the effective time of the corporate transaction (contingent upon the effectiveness of the corporate transaction), and such stock awards will terminate if not exercised (if applicable) at or prior to the effective time of the corporate transaction, and any reacquisition or repurchase rights held by us with respect to such stock awards will lapse (contingent upon the effectiveness of the corporate transaction), and (ii) any such stock awards that are held by persons other than current participants will terminate if not exercised (if applicable) prior to the effective time of the corporate transaction, except that any reacquisition or repurchase rights held by us with respect to such stock awards will not terminate and may continue to be exercised notwithstanding the corporate transaction.

In the event a stock award will terminate if not exercised prior to the effective time of a corporate transaction, the plan administrator may provide, in its sole discretion, that the holder of such stock award may not exercise such stock award but instead will receive a payment equal in value to the excess (if any) of (i) the per share amount

[Table of Contents](#)

payable to holders of common stock in connection with the corporate transaction, over (ii) any per share exercise price payable by such holder, if applicable. In addition, any escrow, holdback, earn-out or similar provisions in the definitive agreement for the corporate transaction may apply to such payment to the same extent and in the same manner as such provisions apply to the holders of our common stock.

Under the 2024 Plan, a corporate transaction is generally defined as the consummation of: (1) a sale of all or substantially all of our assets, (2) the sale or disposition of at least 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction, or (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction.

Change in Control. Awards granted under the 2024 Plan may be subject to acceleration of vesting and exercisability upon or after a change in control as may be provided in the applicable stock award agreement or in any other written agreement between us or any affiliate and the participant, but in the absence of such provision, no such acceleration will automatically occur.

Under the 2024 Plan, a change in control is generally defined as: (1) the acquisition by any person or company of more than 50% of the combined voting power of our then outstanding stock; (2) a consummated merger, consolidation or similar transaction in which our stockholders immediately before the transaction do not own, directly or indirectly, more than 50% of the combined voting power of the surviving entity (or the parent of the surviving entity) in substantially the same proportions as their ownership immediately prior to such transaction; (3) a consummated sale, lease, exclusive license or other disposition of all or substantially all of our assets other than to an entity more than 50% of the combined voting power of which is owned by our stockholders in substantially the same proportions as their ownership of our outstanding voting securities immediately prior to such transaction; or (4) when a majority of our board of directors becomes comprised of individuals who were not serving on our board of directors on the date the 2024 Plan was adopted by the board of directors, or the incumbent board, or whose nomination, appointment, or election was not approved by a majority of the incumbent board still in office.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend, or terminate our 2024 Plan at any time, provided that such action does not materially impair the existing rights of any participant without such participant's written consent. Certain material amendments also require the approval of our stockholders. No ISOs may be granted after the tenth anniversary of the date our board of directors adopts our 2024 Plan. No stock awards may be granted under our 2024 Plan while it is suspended or after it is terminated.

2020 Equity Incentive Plan

Our board of directors and stockholders adopted the 2020 Plan in June 2020. It was most recently amended in August, 2022. Our 2020 Plan provides for the grant of ISOs within the meaning of Section 422 of the Code to employees, including employees of any parent or subsidiary, and for the grant of NSOs, stock appreciation rights, restricted stock, restricted stock units and other forms of stock awards to employees, directors and consultants, including employees and consultants of our affiliates. Once our 2024 Plan becomes effective, no further grants will be made under our 2020 Plan. Any outstanding awards granted under our 2020 Plan will remain subject to the terms of our 2020 Plan and applicable award agreements.

Authorized Shares. Subject to certain capitalization adjustments, the maximum number of shares of common stock that may be issued pursuant to stock awards under the 2020 Plan will not exceed 7,889,537 shares. Shares subject to stock awards granted under our 2020 Plan that expire, are forfeited or otherwise terminate without being exercised in full do not reduce the number of shares available for issuance under our 2020 Plan. Additionally, shares used to pay the exercise price of a stock award or to satisfy the tax withholding obligations related to a stock award become available for future grant under our 2020 Plan.

Plan Administration. Our board of directors, or a duly authorized committee of our board of directors to which the board delegates its administrative authority, will administer our 2020 Plan and is referred to as the "plan administrator" herein. Under our 2020 Plan, the plan administrator has the authority to, among other things, determine who will be granted stock awards, to determine the terms and conditions of each stock award (including the number of shares subject to the stock award, when the stock award will vest and, as applicable, become

[Table of Contents](#)

exercisable), to accelerate the time(s) at which a stock award may vest or be exercised, and to construe and interpret the terms of our 2020 Plan and stock awards granted thereunder.

Under the 2020 Plan, the plan administrator also generally has the authority to effect, with the consent of any adversely affected participant, (A) the reduction of the exercise, purchase, or strike price of any outstanding award; (B) the cancellation of any outstanding award and the grant in substitution thereof of other awards, cash, or other consideration; or (C) any other action that is treated as a repricing under generally accepted accounting principles.

Stock Options. ISOs and NSOs are granted under stock option agreements adopted by the plan administrator. The plan administrator determines the exercise price for stock options, within the terms and conditions of the 2020 Plan, provided that the exercise price of a stock option generally cannot be less than 100% of the fair market value of our common stock on the date of grant (or 110% of the fair market value for certain major stockholders). Options granted under the 2020 Plan vest at the rate specified in the stock option agreement as determined by the plan administrator.

The plan administrator determines the term of stock options granted under the 2020 Plan, up to a maximum of 10 years (or five years, for certain major stockholders). The plan administrator shall determine the effect on a stock award of the disability, death, retirement, authorized leave of absence, or any other change or purported change in a holder's status.

Acceptable consideration for the purchase of common stock issued upon the exercise of a stock option will be determined by the plan administrator and may include (1) cash, check, bank draft, electronic funds transfer or money order payable to us, (2) subject to company and/or Board consent and provided that at the time of exercise the common stock is publicly traded, a broker-assisted cashless exercise, (3) subject to company and/or Board consent and provided that at the time of exercise the common stock is publicly traded, the tender of shares of our common stock previously owned by the optionholder, (4) subject to company and/or Board consent at the time of exercise, a net exercise of the option if it is an NSO, (5) a deferred payment arrangement, or (6) other legal consideration approved by the plan administrator.

Unless the plan administrator provides otherwise, options generally are not transferable except by will or the laws of descent and distribution. Subject to approval of the plan administrator (i) an option may be transferred pursuant to a domestic relations order, official marital settlement agreement, or other divorce or separation instrument and (ii) an optionholder may designate a beneficiary who may exercise the option following the optionholder's death.

Changes to Capital Structure. In the event of a "capitalization adjustment," the board of directors, in its discretion, will make appropriate and proportionate adjustments to (1) the class(es) and maximum number of shares reserved for issuance under the 2020 Plan, (2) the class(es) and maximum number of shares that may be issued on the exercise of ISOs, and (3) the class(es) and number of shares and exercise price, strike price, or purchase price, if applicable, of all outstanding stock awards. For purposes of the 2020 Plan, "capitalization adjustment" generally means any change that is made in (or other events occurring with respect to) our common stock subject to the 2020 Plan or any award without the receipt of consideration by us through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination or exchange of shares, change in corporate structure, or other similar equity restructuring transaction (within the meaning of Statement of Financial Accounting Standards Board ASC Topic 718).

Corporate Transactions. Our 2020 Plan provides that in the event of a "corporate transaction," unless otherwise provided in an award agreement or other written agreement between us and the award holder or unless otherwise expressly provided by our board of directors at the time of grant of a stock award, our board of directors may take one or more of the following actions with respect to such stock awards:

- arrange for the assumption, continuation, or substitution of a stock award by a surviving or acquiring corporation;
- arrange for the assignment of any reacquisition or repurchase rights held by us to the surviving or acquiring corporation;

[Table of Contents](#)

- accelerate the vesting, in whole or in part, of the stock award and provide for its termination if not exercised (if applicable) at or before the effective time of the transaction;
- arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by us;
- cancel or arrange for the cancellation of the stock award, to the extent not vested or not exercised before the effective time of the transaction, in exchange for such cash consideration (including no consideration) as our board of directors, in its sole discretion, may consider appropriate; and
- make a payment equal to the excess, if any, of (A) the value of the property the participant would have received on exercise of the award immediately before the effective time of the transaction, over (B) any exercise price payable by the participant in connection with the exercise.

The plan administrator is not obligated to treat all stock awards or portions of stock awards in the same manner and is not obligated to treat all participants in the same manner.

Under the 2020 Plan, a “corporate transaction” is generally defined as the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events: (1) a sale of all or substantially all of our assets or similar transaction, (2) the sale or disposition of more than 50% of our outstanding securities, (3) a merger or consolidation where we do not survive the transaction or similar transaction, or (4) a merger, consolidation or similar transaction where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction.

Change in Control. A stock award may be subject to additional acceleration of vesting and exercisability upon or after a change in control as may be provided in an applicable award agreement or other written agreement, but in the absence of such provision, no such acceleration will occur. We have a form of option grant agreement outstanding that provides for full acceleration of vesting in the event of either a termination without cause or a resignation for good reason upon or within 3 months prior to, or 12 months after, the effective time of a change in control. Under the 2020 Plan, a “change in control” is generally defined as (1) certain acquisitions by a person or company of more than 50% of the combined voting power of our then outstanding stock, (2) a merger, consolidation or similar transaction in which our stockholders immediately before the transaction do not own, directly or indirectly, more than 50% of the combined voting power of the surviving entity (or the parent of the surviving entity) in substantially the same proportions as their ownership immediately prior to such transaction, or (3) a sale, lease, exclusive license or other disposition of all or substantially all of our consolidated assets other than to an entity more than 50% of the combined voting power of which is owned by our stockholders in substantially the same proportions as their ownership of our outstanding voting securities immediately prior to such transaction.

Plan Amendment or Termination. Our board of directors has the authority to amend, suspend, or terminate our 2020 Plan, provided that such action does not impair the existing rights of any participant without such participant’s written consent. Certain material amendments also require the approval of our stockholders. Unless terminated sooner, the 2020 Plan will automatically terminate on June 23, 2030. No stock awards may be granted under our 2020 Plan while it is suspended or after it is terminated. Once the 2024 Plan is effective, no further grants will be made under the 2020 Plan.

2024 Employee Stock Purchase Plan

Our board of directors adopted our 2024 Employee Stock Purchase Plan (ESPP) in 2024 and our stockholders approved our ESPP in 2024. The ESPP will become effective immediately prior to and contingent upon the date of the underwriting agreement related to this offering. The purpose of the ESPP is to secure the services of new employees, to retain the services of existing employees and to provide incentives for such individuals to exert maximum efforts toward our success and that of our affiliates. Our ESPP will be designed to allow eligible U.S. employees to purchase our common stock in a manner that may qualify for favorable tax treatment under Section 423 of the Code.

Share Reserve. Following this offering, the ESPP will authorize the issuance of _____ shares of our common stock pursuant to purchase rights granted to our employees or to employees of any of our designated affiliates. The number of shares of our common stock reserved for issuance will automatically increase on January 1 of each year, from January 1, 2025 through and including January 1, 2034, by the lesser of (1) 1% of the total number of shares of our common stock outstanding on the last day of the preceding calendar year, and (2) _____ shares of our

[Table of Contents](#)

common stock; provided, that prior to the date of any such increase, our board of directors may determine that such increase will be less than the amount set forth in clauses (1) and (2).

Administration. Our board of directors intends to delegate concurrent authority to administer the ESPP to our compensation committee. The ESPP is implemented through a series of offerings under which eligible employees are granted rights to purchase shares of our common stock on specified dates during such offerings. Under the ESPP, we may specify offerings with durations of not more than 27 months, and may specify shorter purchase periods within each offering. Each offering will have one or more purchase dates on which shares of our common stock will be purchased for employees participating in the offering. An offering under the ESPP may be terminated under certain circumstances.

Payroll Deductions. Generally, all regular employees, including executive officers, employed by us or by any of our designated affiliates, may participate in the ESPP and may contribute, normally through payroll deductions, up to a specified percentage of their earnings (as set forth in, and as defined in, the offering memorandum our board of directors or compensation committee may adopt from time to time with respect to offerings under our ESPP) for the purchase of our common stock under the ESPP. Unless otherwise determined by our board of directors, common stock will be purchased for the accounts of employees participating in the ESPP at a price per share equal to the lower of (a) 85% of the fair market value of a share of our common stock on the first trading date of an offering or (b) 85% of the fair market value of a share of our common stock on the date of purchase.

Limitations. Employees may have to satisfy one or more of the following service requirements before participating in the ESPP, as determined by our board of directors, including: (1) being customarily employed for more than 20 hours per week; (2) being customarily employed for more than five months per calendar year; or (3) continuous employment with us or one of our affiliates for a period of time (not to exceed two years). No employee may purchase shares under the ESPP at a rate in excess of \$25,000 worth of our common stock based on the fair market value per share of our common stock at the beginning of an offering for each year such a purchase right is outstanding. Finally, no employee will be eligible for the grant of any purchase rights under the ESPP if immediately after such rights are granted, such employee has voting power over 5% or more of our outstanding capital stock measured by vote or value pursuant to Section 424(d) of the Code.

Changes to Capital Structure. In the event that there occurs a change in our capital structure through such actions as a stock split, merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or similar transaction, the board of directors will make appropriate adjustments to (1) the number of shares reserved under the ESPP, (2) the maximum number of shares by which the share reserve may increase automatically each year, (3) the number of shares and purchase price of all outstanding purchase rights and (4) the number of shares that are subject to purchase limits under ongoing offerings.

Corporate Transactions. In the event of a corporate transaction (as defined in the ESPP), any then-outstanding rights to purchase our stock under the ESPP may be assumed, continued or substituted for by any surviving or acquiring entity (or its parent company). If the surviving or acquiring entity (or its parent company) elects not to assume, continue or substitute for such purchase rights, then the participants' accumulated payroll contributions will be used to purchase shares of our common stock within 10 business days prior to such corporate transaction, and such purchase rights will terminate immediately after such purchase.

Under the ESPP, a corporate transaction is generally the consummation of: (1) a sale of all or substantially all of our assets; (2) the sale or disposition of more than 50% of our outstanding securities; (3) a merger or consolidation where we do not survive the transaction; and (4) a merger or consolidation where we do survive the transaction but the shares of our common stock outstanding immediately before such transaction are converted or exchanged into other property by virtue of the transaction.

ESPP Amendments, Termination. Our board of directors has the authority to amend or terminate our ESPP, provided that except in certain circumstances such amendment or termination may not materially impair any outstanding purchase rights without the holder's consent. We will obtain stockholder approval of any amendment to our ESPP, as required by applicable law or listing requirements.

Non-Employee Director Compensation

In addition to reimbursing all of our non-employee directors for their reasonable out-of-pocket expenses in connection with attending board of directors and committee meetings, we adopted a non-employee director compensation policy in May 2021 that is effective until the execution and delivery of the underwriting agreement relating to this offering. For additional information please see the subsection titled “—Pre-IPO Non-employee Director Compensation Policy” below.

Pre-IPO Non-Employee Director Compensation Policy

Our board of directors adopted a non-employee director compensation policy (the Pre-IPO Compensation Policy) in May 2021 that is effective until the execution and delivery of the underwriting agreement related to this offering. The Pre-IPO Compensation Policy is applicable to all directors who are not also serving as an employee or consultant, and who are not affiliated with one of our related parties or our investors, and provides that each such director will receive the following compensation:

- an annual cash retainer of \$30,000;
- an additional annual cash retainer of \$15,000 for service as chair of the audit committee; and
- an initial option grant to purchase 60,000 shares of our common stock, vesting in 36 equal monthly installments beginning on the date of the eligible director's election or appointment to our board of directors, subject to the director's Continuous Service (as defined in the 2020 Plan) through each such vesting date and will vest in full upon a Change in Control (as defined in the 2020 Plan).

The following table sets forth in summary form information concerning the compensation that we paid or awarded during the year ended December 31, 2023, to each of our non-employee directors who served on our board of directors during 2023. A director who is also our employee receives no additional compensation for his or her or their services as a director.

NAME	FEES EARNED OR PAID IN CASH (\$) ⁽¹⁾	OPTION AWARDS (\$) ^{(2) (3)}	ALL OTHER COMPENSATION (\$)	TOTAL (\$)
Brian Daniels, M.D.	—	—	—	—
Laura Bessen, M.D.	30,000	16,816	—	46,816
Elizabeth Hougen	45,000	25,823	—	70,823
Yong-Jun Huh	—	—	—	—
Linda Kozick ⁽⁵⁾	30,000	25,823	—	55,823
James Park	—	—	—	—
Edith A. Perez, M.D. ⁽⁵⁾	30,000	12,031	24,000 ⁽⁴⁾	66,031
Laura Stoppel, Ph.D.	—	—	—	—
Yvonne Yamanaka, Ph.D.	—	—	—	—

⁽¹⁾ Represents (i) fees paid in fiscal year 2023. Dr. Daniels, Mr. Huh, Mr. Park, Dr. Stoppel and Dr. Yamanaka did not receive compensation for their service to us as non-employee directors in fiscal year 2023.

⁽²⁾ This column also reflects the incremental fair value in connection with the stock option repricing completed in April 2023 of the eligible options held by the directors as of such date of \$16,816, \$25,823, \$25,823 and \$12,031 for Dr. Bessen, Ms. Hougen, Ms. Kozick and Dr. Perez, respectively.

⁽³⁾ As of December 31, 2023, the aggregate number of shares underlying outstanding options to purchase our common stock held by our non-employee directors was 60,000 each with respect to Drs. Bessen and Perez and Meses. Hougen and Kozick. None of our other non-employee directors held any outstanding options as of December 31, 2023. In addition, as of December 31, 2023, none of our non-employee directors held any stock awards.

⁽⁴⁾ Represents \$24,000 in cash compensation received for serving on our clinical advisory board (CAB).

⁽⁵⁾ Ms. Kozick and Dr. Perez resigned from our board of directors in May 2024.

Option grants described above were granted under our 2020 Plan, the terms of which are described in more detail above under “Executive and Director Compensation—Equity Incentive Plans—2020 Equity Incentive Plan.”.

[Table of Contents](#)

In April 2022, we entered into a clinical advisory board consulting agreement with Dr. Perez, pursuant to which, Dr. Perez will be compensated \$6,000 per calendar quarter for her service on our CAB.

In April 2023, we repriced certain outstanding options, including all options held by Drs. Bessen and Perez and Mses. Hougen and Kozick. The amendment reduced the exercise price per share of such options to \$1.14, the fair market value of our common stock as determined by our board of directors on the date of the repricing. The repricing is further described above under “Equity-based incentive awards—Repricing.”

In November 2023, we entered into a consulting agreement with Dr. Miralles, who subsequently joined our board of directors in May 2024, pursuant to which Dr. Miralles agreed to provide consulting services to us regarding strategic and business development activities. As compensation for such consulting services, and in accordance with the terms of the consulting agreement, (i) we pay Dr. Miralles \$16,000 per month for his services and (ii) granted him an option to purchase 57,000 shares of Common Stock under our 2020 Plan in January 2024 vesting in equal monthly installments over six months with an exercise price of \$1.18 per share. In addition, in March 2024, Dr. Miralles was granted an option to purchase 57,000 shares of Common Stock under our 2020 Plan, vesting in equal monthly installments over six months beginning in May 2024 with an exercise price of \$1.18 per share.

In May 2024, we amended all options held by Ms. Kozick and Dr. Perez to extend the post-termination exercise periods such that the vested shares subject to the options as of May 2024 will be exercisable through and until the date that is twelve months following May 2024, subject to earlier termination as otherwise provided in our 2020 EIP and the applicable option agreements. All the other terms of such options remained the same, including the number of shares granted, vesting schedule and expiration date.

In May 2024, our compensation committee of the board of directors granted options under our 2020 Plan to purchase 15,000 shares to each of Ms. Hougen, Ms. Kozick, Dr. Bessen and Dr. Perez. Each option has an exercise price of \$3.07 per share, which was the fair market value per share of our common stock on the date of grant, as determined by our board of directors, and shall vest in full upon the earlier of (i) the first anniversary of the closing of our initial public offering and (ii) the date of our first annual meeting of stockholders, subject to the respective director’s continuous service with us as of each such vesting date.

Post IPO Non-Employee Director Compensation Policy

Our board of directors plans to adopt a non-employee director compensation policy (the Post-IPO Compensation Policy) that will become effective upon the execution and delivery of the underwriting agreement related to this offering and will be applicable to all of our non-employee directors. The Post IPO-Compensation Policy will replace our Pre-IPO Compensation Policy in its entirety. This Post-IPO Compensation Policy provides that each such non-employee director will receive the following compensation for service on our board of directors:

- an annual cash retainer of _____ ;
- an additional annual cash retainer of _____ for service as non-employee Chairman of the board of directors or lead independent director;
- an additional annual cash retainer of _____ , _____ and _____ for service as a non-chair member of the audit committee, compensation committee, and the nominating and corporate governance committee, respectively;
- an additional annual cash retainer of _____ , _____ and _____ for service as chairman of the audit committee, chairman of the compensation committee, and chairman of the nominating and corporate governance committee, respectively (in lieu of the committee member retainer above);
- an initial option grant to purchase _____ shares of our common stock, vesting in _____ equal monthly installments; and
- an annual option grant to purchase _____ shares of our common stock, vesting on the earlier of (i) the one-year anniversary of the date of grant and (ii) the day before the next annual meeting.

Each of the option grants described above will be granted under our 2024 Plan, the terms of which are described in more detail above under “Executive and Director Compensation—Equity Incentive Plans—2024 Equity Incentive Plan.” Each such option grant will vest and become exercisable subject to the director’s continuous service with us,

provided that each option will vest in full upon a change in control (as defined in the 2024 Plan) of the company. The term of each option will be 10 years, subject to earlier termination as provided in the 2024 Plan.

Limitations on Liability and Indemnification

Our amended and restated certificate of incorporation, which will become effective immediately prior to the closing of this offering, will contain provisions that limit the liability of our current and former directors and officers for monetary damages to the fullest extent permitted by Delaware law. Delaware law provides that directors and officers of a corporation will not be personally liable for monetary damages for any breach of fiduciary duties as directors or officers, except liability for:

- any breach of the director's or officer's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- as a director, unlawful payments of dividends or unlawful stock repurchases or redemptions;
- as an officer, derivative claims brought on behalf of the corporation by a stockholder; or
- any transaction from which the director or officer derived an improper personal benefit.

Such limitation of liability does not apply to liabilities arising under federal securities laws and does not affect the availability of equitable remedies such as injunctive relief or rescission.

Our amended and restated certificate of incorporation will authorize us to indemnify our directors, officers, employees and other agents to the fullest extent permitted by Delaware law. Our amended and restated bylaws will provide that we are required to indemnify our directors and officers to the fullest extent permitted by Delaware law and may indemnify our other employees and agents. Our amended and restated bylaws will also provide that, on satisfaction of certain conditions, we will advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee, or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under the provisions of Delaware law. We have entered and expect to continue to enter into agreements to indemnify our directors, executive officers and other employees as determined by the board of directors. With certain exceptions, these agreements provide for indemnification for related expenses including attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding.

We believe that these amended and restated certificate of incorporation and amended and restated bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain customary directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and other stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage awards against directors and officers as required by these indemnification provisions.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted for directors, executive officers, or persons controlling us, we have been informed that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

The following includes a summary of transactions since January 1, 2022, to which we have been a party, in which the amount involved in the transaction exceeded the lesser of \$120,000 or 1% of the average of our total assets as of December 31, 2022 and 2023, and in which any of our directors, executive officers or, to our knowledge, beneficial owners of more than 5% of our capital stock at the time of such transaction, or any member of the immediate family of any of the foregoing persons had or will have a direct or indirect material interest, other than equity and other compensation, termination, change in control and other arrangements, which are described under “Executive and Director Compensation.”

Simple Agreements for Future Equity

In September 2023 and November 2023, we entered into Simple Agreements for Future Equity (the SAFE financing) with various investors, pursuant to which we received an aggregate of approximately \$24.4 million.

The participants in the SAFE financing included the following holders of more than 5% of our capital stock, or entities affiliated with them:

PARTICIPANTS	AGGREGATE CONSIDERATION
GC Corp. and its affiliate ⁽¹⁾	\$ 5,614,424
5AM Ventures VI, L.P. and its affiliate ⁽²⁾	\$ 4,709,212
venBio Global Strategic Fund III, L.P. ⁽³⁾	\$ 4,709,212
RA Capital Healthcare Fund, L.P. and its affiliate ⁽⁴⁾	\$ 4,709,212
Venrock Healthcare Capital Partners EG, L.P. and its affiliate ⁽⁵⁾	\$ 3,689,300

- (1) Consists of (i) \$3,000,000 received from GC Corp. and (ii) \$2,614,424 received from GC Cell. James Park and Yong-Jun Huh, each a member of our board of directors at the time of the SAFE financing, are affiliated with the GC Cell and GC Corp., respectively, at the time of the financing, which collectively held more than 5% of our capital stock at the time of the SAFE financing.
- (2) Consists of (i) \$1,152,254 received from 5AM Ventures VI, L.P. and (ii) \$3,556,958 received from 5AM Opportunities II, L.P. Brian Daniels, M.D., the Chairperson of our board of directors at the time of the SAFE financing, is affiliated with 5AM Ventures VI, L.P., which held more than 5% of our capital stock at the time of the SAFE financing.
- (3) Yvonne Yamanaka, Ph.D., a member of our board of directors at the time of the SAFE financing, is affiliated with venBio Global Strategic Fund III, L.P., which held more than 5% of our capital stock at the time of the SAFE financing.
- (4) Consists of (i) \$3,296,448 received from RA Capital Healthcare Fund, L.P. and (ii) \$1,412,764 received from RA Capital Nexus Fund III, L.P. Laura Stoppel, Ph.D., a member of our board of directors at the time of the SAFE financing, is affiliated with RA Capital Healthcare Fund, L.P., RA Capital Nexus Fund, L.P. and Blackwell Partners LLC—Series A, which collectively held more than 5% of our capital stock at the time of the SAFE financing.
- (5) Consists of (i) \$2,622,354 received from Venrock Healthcare Capital Partners EG, L.P., (ii) \$969,917 received from Venrock Healthcare Capital Partners III, L.P. and (iii) \$97,029 received from VHCP Co-Investment Holdings III, LLC.

Investor Agreements

In connection with our Series B financing, we entered into an amended and restated investors' rights agreement, amended and restated voting agreement, as amended, and amended and restated right of first refusal and co-sale agreement, which contain registration rights, information rights, voting rights, and rights of first refusal and co-sale, among other things, with certain of our stockholders. Pursuant to our voting agreement, as amended, certain of our stockholders have the right to designate member(s) to be elected to our board of directors. See the section titled “Management—Family Relationships and Other Arrangements.” The foregoing agreements will terminate upon the closing of this offering, except for the registration rights set forth in the investors' rights agreement, as more fully described below in “Description of Capital Stock—Registration Rights.”

License and Manufacturing Agreements

Option and License Agreement with GC Cell

In September 2019, we entered into the Core Agreement, as amended in June 2020 and February 2022, with GC Cell, formerly GC Lab Cell Corporation. GC Cell and its affiliates were owners of more than 5% of our outstanding

[Table of Contents](#)

capital stock at the time of the original execution and the amendment of the Core Agreement. In addition, Yu-Kyeong Hwang, Ph.D. and Yong-Jun Huh, each a member of our board of directors as of the time of the original execution and the amendment of the Core Agreement, were affiliated with GC Cell or its affiliates.

Under the Core Agreement, GC Cell granted us an exclusive, royalty-bearing license, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell relating to non-genetically modified and genetically modified NK cells, and culturing, engineering, manufacturing thereof, to research, develop, manufacture, and commercialize NK cell pharmaceutical products in the Artiva Territory, which is anywhere in the world except for Asia, Australia, and New Zealand.

Under the Core Agreement, we are obligated to pay a low single-digit percentage royalty on net sales of any licensed products, the manufacture, use or sale of which is claimed by or uses any Core IP, subject to certain adjustments. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed product and continuing until the later of (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We also have the exclusive option to extend our license to the Core IP to be worldwide with respect to products originated from us in exchange for a specified increase in the applicable royalty. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. For a further description of the Core Agreement, see “Business—Licensing Agreements—Option and License Agreement with GC Cell.”

AB-101 Selected Product License Agreement

In November 2019, we entered into the AB-101 Agreement with GC Cell, as amended in February 2022. GC Cell and its affiliates were owners of more than 5% of our outstanding capital stock at the time of execution of the AB-101 Agreement. In addition, Yu-Kyeong Hwang, Ph.D. and Yong-Jun Huh, each a member of our board of directors as of the time of execution of the AB-101 Agreement, were affiliated with GC Cell or its affiliates.

Under the AB-101 Agreement, GC Cell granted us an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture, and commercialize AB-101. Under the AB-101 Agreement, we are obligated to pay tiered royalties in the low-mid to high single-digit percentage range on annual net sales of any licensed AB-101 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-101 product and continuing until the later of (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We are also obligated to make milestone payments to GC Cell of (i) up to \$22.0 million upon the first achievement of certain development milestones, and (ii) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-101 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. For a further description of the AB-101 Agreement, see “Business—Licensing Agreements—AB-101 Selected Product License Agreement.”

Master Manufacturing Agreement with GC Cell

In March 2020, we entered into a Master Agreement for Manufacturing Services (the Manufacturing Agreement) with GC Cell. GC Cell and its affiliates were owners of more than 5% of our outstanding capital stock at the time of execution of the Manufacturing Agreement. In addition, Yu-Kyeong Hwang, Ph.D. and Yong-Jun Huh, each a member of our board of directors as of the time of execution of the Manufacturing Agreement, were affiliated with GC Cell or its affiliates.

Under the Manufacturing Agreement, we granted GC Cell a limited non-exclusive, non-transferable, non-sublicensable, revocable, royalty-free license to our pre-existing intellectual property that is necessary and useful

to manufacture products for us. Any intellectual property generated in the course of the manufacturing will be owned by us. GC Cell granted us a limited worldwide, royalty-free, fully paid, non-exclusive license, including the right to sublicense through multiple tiers, to GC Cell background technology and improvements thereof used to manufacture products under the agreement. These licenses survive termination of the Manufacturing Agreement. For a further description of the Manufacturing Agreement, see the section titled “Business—License Agreements—Master Manufacturing Agreement with GC Cell.”

Research Services Agreement with GC Cell

In August 2020, we entered into the GC Cell Research Services Agreement with GC Cell, as amended in February 2022. GC Cell and its affiliates were owners of more than 5% of our outstanding capital stock at the time of execution of the GC Cell Research Services Agreement. In addition, Yu-Kyeong Hwang, Ph.D. and Yong-Jun Huh, each a member of our board of directors as of the time of execution of the GC Cell Research Services Agreement, were affiliated with GC Cell or its affiliates.

Under the GC Cell Research Services Agreement, GC Cell agreed to provide research services in support of the research and development of one or more of the products we have licensed from GC Cell. The GC Cell Research Services Agreement provides that the parties will agree to specific projects as work orders under the GC Cell Research Services Agreement. Each work order shall set forth, upon terms mutually agreeable to GC Cell and us, the specific services to be performed by GC Cell, the timeline and schedule for the performance of the services, and the compensation to be paid by us to GC Cell for the provision of such services, as well as any other relevant terms and conditions. Unless otherwise agreed by the parties in a work order, GC Cell will own all intellectual property generated in the course of its provision of services under the Agreement, and all such intellectual property, to the extent related to or arising from the licensed technology under the Core Agreement and selected product license agreements, including the AB-101 Agreement, the AB-201 Agreement and the AB-205 Agreement, will be included in the licenses granted to us thereunder. For a further description of the GC Cell Research Services Agreement, see the section titled “Business—License Agreements—Research Services Agreement with GC Cell.”

AB-201 Selected Product License Agreement

In October 2020, we entered into the AB-201 Agreement with GC Cell, as amended in February 2022 and September 2023. GC Cell and its affiliates were owners of more than 5% of our outstanding capital stock at the time of execution of the AB-201 Agreement. In addition, Yu-Kyeong Hwang, Ph.D. and Yong-Jun Huh, each a member of our board of directors as of the time of execution of the AB-201 Agreement, and James Park, a member of our board of directors as of the time of execution of the September 2023 amendment to the AB-201 Agreement were affiliated with GC Cell or its affiliates.

Under the AB-201 Agreement, we paid a one-time, upfront fee of \$0.3 million as reimbursement of certain costs previously incurred by GC Cell relating to AB-201. We are obligated to (i) pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-201 products and (ii) make milestone payments to GC Cell of (i) up to \$25.0 million upon the first achievement of certain development milestones, and (ii) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay us a royalty at a rate equal to 50.0% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-201 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. GC Cell is further obligated to pay us a low single-digit royalty on net sales outside the Artiva Territory of any licensed AB-201 product, as well as up to \$1.8 million upon the first achievement of certain development milestones.

For a further description of the AB-201 Agreement, see the section titled “Business—License Agreements—AB-201 Selected Product License Agreement.”

AB-205 Selected Product License Agreement

In December 2022, we entered into the AB-205 Agreement with GC Cell for our AB-205 product candidate. Under the AB-205 Agreement, GC Cell granted us an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture, and commercialize AB-205.

Under the AB-205 Agreement, we paid to GC Cell a one-time, upfront payment of \$1.0 million. We are also obligated to pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-205 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-205 product and continuing until the later of (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. We are also obligated to make milestone payments to GC Cell of (i) up to \$29.5 million upon the first achievement of certain development milestones, plus cost sharing of certain development costs incurred by GC Cell, and (ii) up to \$28.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay us a royalty at a rate equal to 50% of the royalty payable by us for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-205 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property.

For a further description of the AB-205 Agreement, see the section entitled “Business—License Agreements—AB-205 Selected Product License Agreement.”

Employment Arrangements, Consulting Agreements and Indemnification Agreements

We have entered into employment agreements with certain of our executive officers. For more information regarding these agreements with our named executive officers, see “Executive and Director Compensation—Employment Arrangements with our Named Executive Officers.”

In November 2023, we entered into a consulting agreement with Dr. Miralles, who subsequently joined our board of directors in May 2024, pursuant to which Dr. Miralles agreed to provide consulting services to us regarding strategic and business development activities. For more information, see the section titled “Executive and Director Compensation—Non-Employee Director Compensation.”

We have entered, and intend to continue to enter, into separate indemnification agreements with each of our directors and executive officers. For more information, see the section titled “Executive and Director Compensation—Limitations on Liability and Indemnification.”

Equity Awards Granted to Executive Officers and Directors

We have granted equity awards to our executive officers, as more fully described in the section titled “Executive and Director Compensation.”

Policies and Procedures for Transactions with Related Persons

Prior to the completion of this offering, we adopted a written related person transactions policy that sets forth our policies and procedures regarding the identification, review, consideration and continuing oversight of “related person transactions.” For purposes of our policy only, a “related person transaction” is a transaction, arrangement or relationship (or any series of similar transactions, arrangements or relationships) in which we and any “related person” are participants involving an amount that exceeds the lesser of \$120,000 or 1% of the average of our total assets at year-end for the last two completed fiscal years. Transactions involving compensation for services provided to us as an employee, consultant or director are not considered related person transactions under this policy. A related person is any executive officer, director, nominee to become a director or a holder of more than 5% of any class of our voting securities, including any of their immediate family members and affiliates, and entities owned or controlled by such persons or entities in which such person has a 5% or greater beneficial ownership interest.

Under the policy, where a transaction has been identified as a related person transaction, management must present information regarding the proposed related person transaction to our audit committee (or, where review by our audit

[Table of Contents](#)

committee would be inappropriate for reasons of conflict of interest or otherwise, to another independent body of our board of directors) for review. The presentation must include a description of, among other things, all of the parties thereto, the direct and indirect interests of the related persons, the purpose of the transaction, the material facts, the benefits of the transaction to us and whether any alternative transactions are available, an assessment of whether the terms are comparable to the terms available from unrelated third parties or to employees generally and management's recommendation. To identify related person transactions in advance, we rely on information supplied by our executive officers, directors and certain significant stockholders. In considering related person transactions, our audit committee or another independent body of our board of directors takes into account the relevant available facts and circumstances including, but not limited to:

- the risks, costs and benefits to us;
- the impact on a director's independence in the event the related person is a director, immediate family member of a director or an entity with which a director is affiliated;
- the terms of the transaction;
- the availability of other sources for comparable services or products; and
- the terms available to or from, as the case may be, unrelated third parties.

In the event a director has an interest in the proposed transaction, the director must recuse himself or herself from the deliberations and approval.

PRINCIPAL STOCKHOLDERS

The following table sets forth information regarding beneficial ownership of our common stock as of May 31, 2024, by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our current executive officers and directors as a group.

We have determined beneficial ownership in accordance with the rules of the SEC. Under these rules, beneficial ownership includes any shares of common stock as to which the individual or entity has sole or shared voting power or investment power. The percentage ownership information under the column titled “Before Offering” is based on 30,944,109 shares of common stock outstanding as of May 31, 2024, after giving effect to the conversion of shares of our convertible preferred stock outstanding as May 31, 2024, into an aggregate of 27,019,554 shares of our common stock, and excludes the automatic conversion of our outstanding SAFEs. The percentage ownership information under the column titled “After Offering” is based on (i) the conversion of all our outstanding SAFEs into _____ shares of common stock, based on an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, at a 15% discount to the initial public offering price and (ii) the sale of _____ shares of common stock in this offering. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options held by such person that are currently exercisable or will become exercisable within 60 days of May 31, 2024, are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person.

Unless noted otherwise, the address of all listed stockholders is c/o Artiva Biotherapeutics, Inc., 5505 Morehouse Drive, Suite 100, San Diego, California 92121.

Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

NAME AND ADDRESS OF BENEFICIAL OWNER	NUMBER OF SHARES BENEFICIALLY OWNED	PERCENTAGE OF SHARES BENEFICIALLY OWNED	
		BEFORE OFFERING	AFTER OFFERING
Greater than 5% Stockholders:			
Entities affiliated with GC Corp. ⁽¹⁾	8,480,990	27.4%	
5AM Ventures VI, L.P. ⁽²⁾	4,641,643	15.0%	
venBio Global Strategic Fund III, L.P. ⁽³⁾	4,641,643	15.0%	
Entities affiliated with RA Capital Healthcare Fund, L.P. ⁽⁴⁾	4,641,643	15.0%	
Directors and Named Executive Officers:			
Fred Aslan, M.D ⁽⁵⁾	1,571,630	4.8%	
Jennifer Bush ⁽⁶⁾	273,202	*	
Christopher Horan ⁽⁷⁾	231,249	*	
Michael E. Faerm	—	*	
Peter Flynn, Ph.D. ⁽⁸⁾	779,354	2.5%	
Brian Daniels, M.D. ⁽¹³⁾	—	*	
Laura Bessen, M.D. ⁽⁹⁾	46,666	*	
Elizabeth Hougen ⁽¹⁰⁾	60,000	*	
Yong-Jun Huh ⁽¹⁾	8,480,990	27.4%	

Table of Contents

NAME AND ADDRESS OF BENEFICIAL OWNER	NUMBER OF SHARES BENEFICIALLY OWNED	PERCENTAGE OF SHARES BENEFICIALLY OWNED	
		BEFORE OFFERING	AFTER OFFERING
James Park ⁽¹¹⁾	2,576,912	8.3%	
Diego Miralles, M.D. ⁽¹²⁾	76,000	*	
Laura Stoppel, Ph.D. ⁽¹³⁾	—	*	
Yvonne Yamanaka, Ph.D. ⁽¹³⁾	—	*	
All current executive officers and directors as a group (14 persons) ⁽¹⁴⁾	11,113,277	33.2%	

* Represents beneficial ownership of less than 1%.

- (1) Consists of (i) 1,530,000 shares of common stock held by GC Corp., (ii) 1,020,000 shares of common stock held by GC Cell Corporation, (iii) 2,926,278 shares of common stock issuable upon conversion of our Series A preferred stock held by GC Corp., (iv) 1,284,185 shares of common stock issuable upon conversion of our Series A preferred stock held by GC Cell Corporation, (v) 1,447,800 shares of common stock issuable upon conversion of our Series B preferred stock held by GC Corp. and (vi) 272,727 shares of common stock issuable upon conversion of our Series B preferred stock held by GC Cell Corporation. Mr. Yong-Jun Huh, a member of our board of directors, serves as Chief Executive Officer of GC Corp. GC Corp., a public Korean holdings company, is the parent company of GC Cell Corporation and is ultimately controlled by its board of directors, consisting of Mr. Yong-Jun Huh, Huh Il-Sup, Park Yong-Tae and Kim Seok-Hwa. Each of these individual directors of GC Corp. may be deemed to share voting and investment power over the shares held by GC Corp. and GC Cell Corporation and each disclaims beneficial ownership of all shares held by such entities, except to the extent of any pecuniary interest therein. The address of each of the above persons and entities is 107 Ihyeon-ro, 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea (16924).
- (2) Consists of (i) 3,700,000 shares of common stock issuable upon conversion of our Series A preferred stock held by 5AM Ventures VI, L.P. and (ii) 941,643 shares of common stock issuable upon conversion of our Series B preferred stock held by 5AM Ventures VI, L.P. Dr. Brian Daniels, the Chairperson of our board of directors, is a Partner at 5AM Venture Management LLC, which is an affiliate of 5AM Ventures VI, L.P. 5AM Partners VI, LLC is the general partner of 5AM Ventures VI, L.P. and may be deemed to have sole investment and voting power over the shares held by 5AM Ventures VI, L.P. Andrew Schwab and Dr. Kush Parmar are the managing members of 5AM Partners VI, LLC, and may be deemed to share voting and dispositive power over the shares held by 5AM Ventures VI, L.P. The address of the above persons and entities is Embarcadero Center 4, Suite 3110, San Francisco, California, 94111.
- (3) Consists of (i) 3,700,000 shares of common stock issuable upon conversion of our Series A preferred stock held by venBio Global Strategic Fund III, L.P. and (ii) 941,643 shares of common stock issuable upon conversion of our Series B preferred stock held by venBio Global Strategic Fund III, L.P. venBio Global Strategic GP III, L.P., a Cayman Islands partnership (General Partner III), is the sole general partner of venBio Global Strategic Fund III, L.P., a Cayman Islands partnership (Fund III). venBio Global Strategic GP III, Ltd., a Cayman Islands company (GP Ltd. III), and together with General Partner III and Fund III, the venBio Funds), is the sole general partner of the General Partner III. Aaron Royston, Robert Adelman and Corey Goodman (together, the Directors), each citizens of the United States, are each a director of the GP Ltd. III and may be deemed to share voting and dispositive power over the shares held by the venBio Funds. The address of each of the above persons and entities is 1700 Owens Street Suite 595 San Francisco, California 94158.
- (4) Consists of (i) 2,475,340 shares of common stock issuable upon conversion of our Series A preferred stock held by RA Capital Healthcare Fund, L.P. (RA Capital Healthcare), (ii) 925,000 shares of common stock issuable upon conversion of our Series A preferred stock held by RA Capital Nexus Fund, L.P. (Nexus Fund), (iii) 299,660 shares of common stock issuable upon conversion of our Series A preferred stock held by Blackwell Partners LLC—Series A (Blackwell), (iv) 706,232 shares of common stock issuable upon conversion of our Series B preferred stock held by RA Capital Healthcare and (v) 235,411 shares of common stock issuable upon conversion of our Series B preferred stock held by Nexus Fund. RA Capital Management, L.P. is the investment manager for RA Capital Healthcare, Nexus Fund and Blackwell. The general partner of RA Capital Management, L.P. is RA Capital Management GP, LLC, of which Peter Kolchinsky and Rajeev Shah are managing members. RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah may be deemed to have voting and investment power over the shares held by RA Capital Healthcare, Nexus Fund and Blackwell. RA Capital Management, L.P., RA Capital Management GP, LLC, Mr. Kolchinsky and Mr. Shah disclaim beneficial ownership of such shares, except to the extent of any pecuniary interest therein. The address of the RA Capital entities is 200 Berkeley Street, 18th Floor, Boston, Massachusetts 02116.
- (5) Consists of 1,571,630 shares of common stock subject to options held by Dr. Aslan that are exercisable within 60 days of May 31, 2024.
- (6) Consists of (i) 100,000 shares of common stock and (ii) 173,302 shares of common stock subject to options held by Ms. Bush that are exercisable within 60 days of May 31, 2024.
- (7) Consists of 231,249 shares of common stock subject to options held by Mr. Horan that are exercisable within 60 days of May 31, 2024.
- (8) Consists of (i) 175,000 shares of common stock and (ii) 604,354 shares of common stock subject to options held by Dr. Flynn that are exercisable within 60 days of May 31, 2024.

[Table of Contents](#)

- (9) Consists of 46,666 shares of common stock subject to options held by Dr. Bessen that are exercisable within 60 days of May 31, 2024.
- (10) Consists of 60,000 shares of common stock subject to options held by Ms. Hougen that are exercisable within 60 days of May 31, 2024.
- (11) Consists of (i) 1,020,000 shares of common stock held by GC Cell Corporation, (ii) 1,284,185 shares of common stock issuable upon conversion of our Series A preferred stock held by GC Cell Corporation and (iii) 272,727 shares of common stock issuable upon conversion of our Series B preferred stock held by GC Cell Corporation. Mr. Park, a member of our board of directors, serves as the Chief Executive Officer of GC Cell Corporation. GC Corp., a public Korean holding company, is the parent company of GC Cell Corporation and is ultimately controlled by its board of directors, consisting of Mr. Huh, a member of our board of directors, Huh Il-Sup, Park Yong-Tae and Kim Seaok-Hwa. Mr. Park and each of these individual directors of GC Corp. may be deemed to share voting and investment power over the shares held by GC Cell Corporation and each disclaims beneficial ownership of all shares held by such entities, except to the extent of any pecuniary interest therein. The address of each of the above persons and entities is 107 Ihyeon-ro, 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 16924, Republic of Korea.
- (12) Consists of 76,000 shares of common stock subject to options held by Dr. Miralles that are exercisable within 60 days of May 31, 2024.
- (13) Consists of 0 shares of common stock held by Drs. Daniels, Stoppel and Yamanaka.
- (14) Consists of (i) the shares described in notes (1), (5), (6), (7) and (9) - (13) above, (ii) 216,145 shares of common stock subject to options held by Dr. Graef that are exercisable within 60 days of May 31, 2024, (iii) 157,395 shares of common stock subject to options held by Dr. Raymon that are exercisable within 60 days of May 31, 2024 and (iv) 0 shares of common stock held by Neha Krishnamohan.

DESCRIPTION OF CAPITAL STOCK

Upon the filing of our amended and restated certificate of incorporation and the closing of this offering, our authorized capital stock will consist of 700,000,000 shares of common stock, par value \$0.0001 per share, and 10,000,000 shares of preferred stock, par value \$0.0001 per share. All of our authorized preferred stock upon the closing of this offering will be undesignated. The following is a summary of the rights of our common and preferred stockholders and some of the provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to and upon the closing of this offering, respectively, and of the Delaware General Corporation Law. This summary is not complete. For more detailed information, please see our amended and restated certificate of incorporation and amended and restated bylaws, which are filed as exhibits to the registration statement of which this prospectus is a part, as well as the relevant provisions of the Delaware General Corporation Law.

Common Stock

Outstanding Shares

As of March 31, 2024, there were 3,551,690 shares of common stock issued and outstanding, held of record by 17 stockholders. This amount excludes our outstanding shares of convertible preferred stock, which will convert into 27,019,554 shares of common stock in connection with the closing of this offering. Based on the number of shares of common stock outstanding as of March 31, 2024, and giving effect to (i) the conversion of all outstanding shares of our convertible preferred stock; (ii) the conversion of all our outstanding Simple Agreements for Future Equity (SAFEs) into _____ shares of common stock, based on an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus at a 15% discount to the initial public offering price, in connection with the closing of this offering; (iii) the issuance by us of _____ shares of common stock in this offering; and (iv) no exercise by the underwriters of their option to purchase additional shares, there will be _____ shares of common stock outstanding upon the closing of this offering.

As of March 31, 2024, there were 6,568,326 shares of common stock subject to outstanding options under our 2020 Plan and 98,750 shares of common stock underlying restricted stock units outstanding under our 2020 Plan.

Voting

Our common stock is entitled to one vote for each share held of record on all matters submitted to a vote of the stockholders, including the election of directors, and does not have cumulative voting rights. Accordingly, the holders of a majority of the shares of our common stock entitled to vote in any election of directors can elect all of the directors standing for election.

Dividends

Subject to preferences that may be applicable to any then-outstanding preferred stock, the holders of common stock are entitled to receive dividends, if any, as may be declared from time to time by our board of directors out of legally available funds.

Liquidation

In the event of our liquidation, dissolution or winding-up, holders of our common stock will be entitled to share ratably in the net assets legally available for distribution to stockholders after the payment of all of our debts and other liabilities, subject to the satisfaction of any liquidation preference granted to the holders of any outstanding shares of preferred stock.

Rights and Preferences

Holders of our common stock have no preemptive, conversion or subscription rights, and there are no redemption or sinking fund provisions applicable to our common stock. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of our preferred stock that we may designate and issue in the future.

Fully Paid and Nonassessable

All of our outstanding shares of common stock are, and the shares of common stock to be issued in this offering will be, fully paid and nonassessable.

Convertible Preferred Stock

As of March 31, 2024, there were 27,019,554 shares of convertible preferred stock outstanding, held of record by 29 stockholders.

In connection with the closing of this offering, all outstanding shares of convertible preferred stock will be converted into 27,019,554 shares of our common stock. Immediately prior to the closing of this offering, our certificate of incorporation will be amended and restated and all of our previously outstanding shares of convertible preferred stock will be converted into shares of common stock. Under the amended and restated certificate of incorporation, our board of directors will have the authority, without further action by the stockholders, to issue up to _____ shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in each such series, to fix the rights, preferences and privileges of the shares of each wholly unissued series and any qualifications, limitations or restrictions thereon and to increase or decrease the number of shares of any such series, but not below the number of shares of such series then outstanding.

Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of the common stock. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions and other corporate purposes, could, among other things, have the effect of delaying, deferring or preventing a change in our control that may otherwise benefit holders of our common stock and may adversely affect the market price of the common stock and the voting and other rights of the holders of common stock. We have no current plans to issue any shares of preferred stock.

SAFE Agreements

As of March 31, 2024, we had in aggregate approximately \$24.4 million outstanding under our Simple Agreements for Future Equity (SAFEs). The SAFEs will convert to _____ shares of our common stock, based on an assumed initial public offering price of \$ _____ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, at a 15% discount to the initial public offering price, in connection with the closing of this offering.

Stock Options

As of March 31, 2024, 6,568,326 shares of common stock were issuable upon the exercise of outstanding stock options, issued under our 2020 Plan, at a weighted-average exercise price of \$1.15 per share. For information regarding the terms of our equity incentive plans, see “Executive and Director Compensation—Equity Incentive Plans.”

Restricted Stock Units

As of March 31, 2024, 98,750 shares of common stock were subject to outstanding restricted stock units issued under our 2020 Plan. For information regarding the terms of our equity incentive plans, see “Executive and Director Compensation — Equity Incentive Plans.”

Registration Rights

After the closing of this offering, certain holders of shares of our common stock, including all of the current preferred stockholders, including certain holders of five percent of our capital stock and entities affiliated with certain of our directors, will be entitled to certain rights with respect to registration of the shares of common stock issued upon conversion of our convertible preferred stock under the Securities Act. These shares are referred to as registrable securities. The holders of these registrable securities possess registration rights pursuant to the terms of the amended and restated investors’ rights agreement and are described in additional detail below.

The registration of shares of our common stock pursuant to the exercise of the registration rights described below would enable the holders to trade these shares without restriction under the Securities Act when the applicable registration statement is declared effective. We are required to pay all registration expenses, other than underwriting discounts, selling commissions and stock transfer taxes of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

[Table of Contents](#)

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit the number of shares the holders may include. The demand, piggyback and Form S-3 registration rights described below will expire upon the earliest to occur of (1) the closing of a "Deemed Liquidation Event," as such term is defined in our amended and restated certificate of incorporation (as currently in effect), (2) with respect to any particular holder, such time after the closing of this offering as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during any three-month period without registration or (3) the fifth anniversary of the closing of this offering.

Demand Registration Rights

The holders of the registrable securities will be entitled to certain demand registration rights. Subject to the terms of the lockup agreements described under "Underwriting" at any time beginning 180 days after the date of this prospectus, the holders of the majority of the registrable securities then outstanding may make a written request that we register all or a portion of their shares on a registration statement on Form S-1, subject to certain specified exceptions. Such request for registration must cover securities that have an aggregate offering price that exceeds \$10.0 million. We will not be required to effect more than two registrations pursuant to these demand registration rights.

Piggyback Registration Rights

In connection with this offering, the holders of registrable securities were entitled to, and the necessary percentage of holders waived, their rights to notice of this offering and to include their shares of registrable securities in this offering. If we propose to register for offer and sale any of our securities under the Securities Act in another offering, either for our own account or for the account of other security holders, the holders of registrable securities will be entitled to certain "piggyback" registration rights allowing them to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, including a registration statement on Form S-3 as discussed below, other than with respect to a demand registration or a registration statement on Forms S-4 or S-8, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration.

Form S-3 Registration Rights

The holders of the registrable securities will be entitled to certain Form S-3 registration rights. Holders of at least 20% of the registrable securities may request that we register for offer and sale their shares on Form S-3 if we are qualified to file a registration statement on Form S-3, subject to certain specified exceptions. Such request for registration on Form S-3 must cover securities the aggregate offering price of which equals or exceeds \$5.0 million. We will not be required to effect more than two registrations on Form S-3 within any 12-month period.

Anti-Takeover Effects of Provisions of Our Amended and Restated Certificate of Incorporation, Our Amended and Restated Bylaws and Delaware Law

Delaware Anti-Takeover Law

We are subject to Section 203 of the Delaware General Corporation Law (Section 203). Section 203 generally prohibits a public Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years following the time that such stockholder became an interested stockholder, unless:

- prior to such time the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned (1) by persons who are directors and also officers and (2) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- at or subsequent to such time, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66-2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a “business combination” to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an “interested stockholder” as any entity or person who beneficially owns, or within the three years prior to the time of determination of interested stockholder status did own, 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by such entity or person.

A Delaware corporation may “opt out” of these provisions with an express provision in its original certificate of incorporation or an express provision in its amended and restated certificate of incorporation or amended and restated bylaws resulting from a stockholders’ amendment approved by at least a majority of the outstanding voting shares. We have not opted out of these provisions. As a result, mergers or other takeover or change in control attempts of us may be discouraged or prevented.

Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Provisions of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to and upon the closing of this offering, respectively, may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our amended and restated certificate of incorporation and amended and restated bylaws:

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change in our control);
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that the board of directors or any individual director may only be removed with cause and the affirmative vote of the holders of at least 66-2/3% of the voting power of all of our then outstanding common stock;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide our board of directors into three classes;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner and also specify requirements as to the form and content of a stockholder’s notice;
- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by the Chairperson of the board, our Chief Executive Officer or by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors;

[Table of Contents](#)

- provide that, unless we consent in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for: (i) any derivative claim or cause of action brought on our behalf, (ii) any claim or cause of action that is based upon a violation of a duty owed by any of our current or former director, officer, employees or stockholder, to us or our stockholders; (iii) any claim or cause of action against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws; (iv) any claim or cause of action seeking to interpret, apply, enforce or determine the validity of our certificate of incorporation or our bylaws; (v) any claim or cause of action as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and (vi) any claim or cause of action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees governed by the internal-affairs doctrine or otherwise related to our internal affairs, in all cases to the fullest extent permitted by applicable law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants; provided, however, that if the designation of such court as the sole and exclusive forum for a claim or action referred to in foregoing clauses (i) through (vi) would violate applicable law, then the United States District Court for the District of Delaware shall be the sole and exclusive forum for such claim or cause of action; and
- provide that unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act, including all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by us, our officers and directors, the underwriters for any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the holders of at least 66-2/3% of our then-outstanding common stock.

Exchange Listing

We have applied to list our common stock on the Nasdaq Global Market under the symbol "ARTV." We believe that upon the completion of this offering, we will meet the standards for listing on Nasdaq, and the closing of this offering is contingent upon such listing.

Limitations on Liability and Indemnification Matters

See the section titled "Executive Compensation—Limitations on Liability and Indemnification."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equiniti Trust Company, LLC. The transfer agent and registrar's address is 6201 15th Avenue, Brooklyn, New York 11219.

SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, there has been no public market for our common stock. Future sales of substantial amounts of common stock in the public market could adversely affect prevailing market prices. Furthermore, since only a limited number of shares will be available for sale shortly after this offering because of contractual and legal restrictions on resale described below, sales of substantial amounts of common stock in the public market after the restrictions lapse could adversely affect the prevailing market price for our common stock as well as our ability to raise equity capital in the future.

Based on the number of shares of our common stock outstanding as of March 31, 2024, upon the closing of this offering and giving effect to (1) the 1-for- reverse stock split of all outstanding shares of our capital stock, (2) the conversion of all of our outstanding shares of convertible preferred stock as of March 31, 2024 into an aggregate of shares of common stock, (3) the conversion of our outstanding SAFEs into shares of common stock, based on an assumed initial public offering price of \$ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, (4) no exercise of the underwriters' option to purchase additional shares of common stock and (5) no exercise of outstanding options, or the vesting and settlement of outstanding restricted stock units, an aggregate of shares of common stock will be outstanding. All of the shares sold in this offering will be freely tradable in the public market without restriction or further registration under the Securities Act, unless held by an affiliate of ours. Except as set forth below, the remaining shares of common stock outstanding after this offering will be restricted as a result of securities laws or lock-up agreements. In addition, any shares sold in this offering to entities affiliated with our existing stockholders and directors will be subject to lock-up agreements. These remaining shares will generally become available for sale in the public market as follows:

- no restricted shares will be eligible for immediate sale upon the closing of this offering;
- up to restricted shares will be eligible for sale under Rule 144 or Rule 701 upon expiration of lock-up agreements 180 days after the date of this prospectus; and
- the remainder of the restricted shares will be eligible for sale from time to time thereafter upon expiration of their respective holding periods under Rule 144, as described below, but could be sold earlier if the holders exercise any available registration rights.

Rule 144

In general, under Rule 144 as currently in effect, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, any person who is not an affiliate of ours and has held their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, may sell shares without restriction, provided current public information about us is available. In addition, under Rule 144, any person who is not an affiliate of ours and has held their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately upon the closing of this offering without regard to whether current public information about us is available. Beginning 90 days after the effective date of the registration statement of which this prospectus is a part, a person who is an affiliate of ours and who has beneficially owned restricted securities for at least six months, including the holding period of any prior owner other than one of our affiliates, is entitled to sell a number of restricted shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately shares immediately after this offering; or
- the average weekly trading volume of our common stock on Nasdaq during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales of restricted shares under Rule 144 held by our affiliates are also subject to requirements regarding the manner of sale, notice and the availability of current public information about us. Rule 144 also provides that affiliates relying on Rule 144 to sell shares of our common stock that are not restricted shares must nonetheless comply with the same restrictions applicable to restricted shares, other than the holding period requirement.

[Table of Contents](#)

Notwithstanding the availability of Rule 144, the holders of substantially all of our restricted shares have entered into lock-up agreements as described below and their restricted shares will become eligible for sale at the expiration of the restrictions set forth in those agreements.

Rule 701

Under Rule 701, shares of our common stock acquired upon the exercise of currently outstanding options or pursuant to other rights granted under our stock plans may be resold by:

- persons other than affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject only to the manner-of-sale provisions of Rule 144; and
- our affiliates, beginning 90 days after the effective date of the registration statement of which this prospectus is a part, subject to the manner-of-sale and volume limitations, current public information and filing requirements of Rule 144, in each case, without compliance with the six-month holding period requirement of Rule 144.

As of March 31, 2024, options to purchase a total of 6,568,326 shares of common stock were outstanding, of which 3,669,463 were vested. Of the total number of shares of our common stock issuable under these options, substantially all are subject to contractual lock-up agreements with us or the underwriters described below under “Underwriting” and will become eligible for sale at the expiration of the restrictions set forth in those agreements unless held by an affiliate of ours.

Lock-Up Agreements

We and our officers, directors, and holders of substantially all of our common stock have agreed with the underwriters, subject to certain exceptions, not to dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 180 days after the date of this prospectus, except with the prior written consent of Jefferies LLC and TD Securities (USA) LLC. This agreement does not apply to any existing employee benefit plans. Jefferies LLC and TD Securities (USA) LLC have advised us that they have no current intent or arrangement to release any of the shares subject to the lock-up agreements prior to the expiration of the lock-up agreements.

After this offering, certain of our employees, including our executive officers and/or directors, may enter into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements relating to the offering described above.

Registration Rights

Upon the closing of this offering, certain holders of shares of our common stock will have rights, subject to certain conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. After registration pursuant to these rights, these shares will become freely tradable without restriction under the Securities Act. See “Description of Capital Stock—Registration Rights” for additional information regarding these registration rights.

Equity Incentive Plans

We intend to file with the SEC a registration statement on Form S-8 under the Securities Act covering the shares of common stock reserved for issuance under the 2020 Plan, the 2024 Plan and the ESPP. The registration statement is expected to be filed and become effective as soon as practicable after the closing of this offering. Accordingly, shares registered under the registration statement will be available for sale in the open market following its effective date, subject to Rule 144 volume limitations and the lock-up agreements described above, if applicable.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS

The following is a summary of the material U.S. federal income tax consequences to non-U.S. holders (as defined below) of the acquisition, ownership and disposition of our common stock issued pursuant to this offering. This discussion is not a complete analysis of all potential U.S. federal income tax consequences relating thereto, does not address the potential application of the Medicare contribution tax on net investment income, the alternative minimum tax, or the special tax accounting rules under Section 451(b) of the Code, and does not address any estate or gift tax consequences or any tax consequences arising under any state, local or foreign tax laws, or any other U.S. federal tax laws. This discussion is based on the Code, and applicable Treasury Regulations promulgated thereunder, judicial decisions and published rulings and administrative pronouncements of the Internal Revenue Service (IRS), all as in effect as of the date hereof. These authorities are subject to differing interpretations and may change, possibly retroactively, resulting in U.S. federal income tax consequences different from those discussed below. We have not requested a ruling from the IRS with respect to the statements made and the conclusions reached in the following summary, and there can be no assurance that the IRS or a court will agree with such statements and conclusions.

This discussion is limited to non-U.S. holders who purchase our common stock pursuant to this offering and who hold our common stock as a “capital asset” within the meaning of Section 1221 of the Code (generally, property held for investment). This discussion does not address all of the U.S. federal income tax consequences that may be relevant to a particular holder in light of such holder’s circumstances. This discussion also does not consider any specific facts or circumstances that may be relevant to holders subject to special rules under the U.S. federal income tax laws, including:

- certain former citizens or long-term residents of the United States;
- partnerships or other pass-through entities (and investors therein);
- “controlled foreign corporations”;
- “passive foreign investment companies”;
- corporations that accumulate earnings to avoid U.S. federal income tax;
- banks, financial institutions, investment funds, insurance companies, brokers, dealers or traders in securities;
- tax-exempt organizations and governmental organizations;
- tax-qualified retirement plans;
- “qualified foreign pension funds” as defined in Section 897(l)(2) of the Code and entities all of the interests of which are held by qualified foreign pension funds;
- persons that own, or have owned, actually or constructively, more than 5% of our common stock at any time; and
- persons holding our common stock as part of a hedging or conversion transaction, straddle, synthetic security, constructive sale, or other risk reduction strategy or integrated investment.

If an entity or arrangement that is classified as a partnership for U.S. federal income tax purposes holds our common stock, the U.S. federal income tax treatment of a partner in the partnership will generally depend on the status of the partner, the activities of the partnership and certain determinations made at the partner level. Partnerships holding our common stock and the partners in such partnerships are urged to consult their tax advisors about the particular U.S. federal income tax consequences to them of holding and disposing of our common stock.

THIS DISCUSSION IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TAX ADVICE. PROSPECTIVE INVESTORS SHOULD CONSULT THEIR TAX ADVISORS REGARDING THE PARTICULAR U.S. FEDERAL INCOME TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING AND DISPOSING OF OUR COMMON STOCK, AS WELL AS ANY TAX CONSEQUENCES ARISING UNDER ANY STATE, LOCAL OR FOREIGN TAX LAWS AND ANY OTHER U.S. FEDERAL TAX LAWS.

Definition of Non-U.S. Holder

For purposes of this discussion, a non-U.S. holder is any beneficial owner of our common stock that is not a “U.S. person” or a partnership (including any entity or arrangement treated as a partnership) for U.S. federal income tax purposes. A U.S. person is any person that, for U.S. federal income tax purposes, is or is treated as any of the following:

- an individual who is a citizen or resident of the United States;
- a corporation (or entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States, any state thereof or the District of Columbia;
- an estate, the income of which is subject to U.S. federal income tax regardless of its source; or
- a trust (i) whose administration is subject to the primary supervision of a U.S. court and which has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (ii) that has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

Distributions on Our Common Stock

We have never declared or paid any cash dividends on our capital stock and we do not intend to pay cash dividends on our common stock for the foreseeable future. However, if we make cash or other property distributions on our common stock, such distributions will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. Amounts not treated as dividends for U.S. federal income tax purposes will constitute a return of capital and will first be applied against and reduce a holder’s tax basis in our common stock, but not below zero. Any excess will be treated as gain realized on the sale or other disposition of our common stock and will be treated as described under the section titled “Gain on Disposition of Our Common Stock” below.

Subject to the discussions below regarding effectively connected income, backup withholding and Sections 1471 through 1474 of the Code (commonly referred to as FATCA), dividends paid to a non-U.S. holder of our common stock generally will be subject to U.S. federal withholding tax at a rate of 30% of the gross amount of the dividends or such lower rate specified by an applicable income tax treaty. To receive the benefit of a reduced treaty rate, a non-U.S. holder must furnish us or our paying agent with a valid IRS Form W-8BEN or IRS Form W-8BEN-E (or applicable successor form) and satisfy applicable certification and other requirements. This certification must be provided to us or our paying agent before the payment of dividends and must be updated periodically. If the non-U.S. holder holds the stock through a financial institution or other agent acting on the non-U.S. holder’s behalf, the non-U.S. holder will be required to provide appropriate documentation to the agent, which then will be required to provide certification to us or our paying agent, either directly or through other intermediaries.

Non-U.S. holders that do not provide the required certification on a timely basis, but that qualify for a reduced treaty rate, may obtain a refund of any excess amounts withheld by timely filing an appropriate claim for refund with the IRS.

If a non-U.S. holder holds our common stock in connection with the conduct of a trade or business in the United States, and dividends paid on our common stock are effectively connected with such holder’s U.S. trade or business (and are attributable to such holder’s permanent establishment in the United States if required by an applicable tax treaty), the non-U.S. holder will be exempt from U.S. federal withholding tax. To claim the exemption, the non-U.S. holder must generally furnish a valid IRS Form W-8ECI (or applicable successor form) to the applicable withholding agent.

However, any such effectively connected dividends paid on our common stock generally will be subject to U.S. federal income tax on a net income basis at the regular U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a foreign corporation also may be subject to an additional branch profits tax equal to 30% (unless an applicable income tax treaty provides for different treatment) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items. Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Gain on Disposition of Our Common Stock

Subject to the discussions below regarding backup withholding and FATCA, a non-U.S. holder generally will not be subject to U.S. federal income tax on any gain realized on the sale or other disposition of our common stock, unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a trade or business in the United States, and if required by an applicable income tax treaty, is attributable to a permanent establishment maintained by the non-U.S. holder in the United States;
- the non-U.S. holder is a nonresident alien individual present in the United States for 183 days or more during the taxable year of the disposition, and certain other requirements are met; or
- our common stock constitutes a "United States real property interest" by reason of our status as a United States real property holding corporation (USRPHC) for U.S. federal income tax purposes at any time within the shorter of the five-year period preceding the disposition or the non-U.S. holder's holding period for our common stock, and our common stock is not "regularly traded" on an established securities market (as defined by applicable Treasury Regulations).

Determining whether we are a USRPHC depends on the fair market value of our U.S. real property interests relative to the fair market value of our worldwide real property interests and our other assets used or held for use in a trade or business. We believe that we are not currently and do not anticipate becoming a USRPHC for U.S. federal income tax purposes, although there can be no assurance we will not in the future become a USRPHC. If we are or become a USRPHC and the "regularly traded" exception noted above does not apply to the disposition, a non-U.S. holder will generally be taxed on any gain in the same manner as gain that is effectively connected with the conduct of a U.S. trade or business, except that the branch profits tax generally will not apply. Prospective investors are encouraged to consult their own tax advisors regarding the possible consequences to them if we are, or were to become, a USRPHC.

Gain described in the first bullet point above generally will be subject to U.S. federal income tax on a net income basis at the regular U.S. federal income tax rates in the same manner as if such holder were a resident of the United States. A non-U.S. holder that is a foreign corporation also may be subject to an additional branch profits tax equal to 30% (unless an applicable income tax treaty provides for different treatment) of its effectively connected earnings and profits for the taxable year, as adjusted for certain items. A non-U.S. holder described in the second bullet point above will be subject to U.S. federal income tax at a flat 30% rate (unless an applicable income tax treaty provides for different treatment) on gain realized upon the sale or other taxable disposition of our common stock, but may be offset by certain U.S.-source capital losses (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses. Non-U.S. holders should consult their tax advisors regarding any applicable income tax treaties that may provide for different rules.

Information Reporting and Backup Withholding

Annual reports are required to be filed with the IRS and provided to each non-U.S. holder indicating distributions on our common stock paid to such holder and the amount of any tax withheld with respect to those distributions. These information reporting requirements apply even if no withholding was required because the distributions were effectively connected with the holder's conduct of a U.S. trade or business, or withholding was reduced or eliminated by an applicable income tax treaty. This information also may be made available under a specific treaty or agreement with the tax authorities in the country in which the non-U.S. holder resides or is established. Backup withholding, currently at a 24% rate, generally will not apply to payments to a non-U.S. holder of dividends on or the gross proceeds of a disposition of our common stock provided the non-U.S. holder furnishes the required certification for its non-U.S. status, such as by providing a valid IRS Form W-8BEN, IRS Form W-8BEN-E or IRS Form W-8ECI, or certain other requirements are met. Backup withholding may apply if the payor has actual knowledge, or reason to know, that the holder is a U.S. person.

Backup withholding is not an additional tax. If any amount is withheld under the backup withholding rules, the non-U.S. holder should consult with a U.S. tax advisor regarding the possibility of and procedure for obtaining a refund or a credit against the non-U.S. holder's U.S. federal income tax liability, if any.

Withholding on Foreign Entities

FATCA imposes a U.S. federal withholding tax of 30% on certain payments made to a “foreign financial institution” (as specially defined under these rules) unless such institution enters into an agreement with the U.S. government to withhold on certain payments and to collect and provide to the U.S. tax authorities certain information regarding certain U.S. account holders of such institution (which includes certain equity and debt holders of such institution, as well as certain account holders that are foreign entities with U.S. owners) or an exemption applies. FATCA also generally imposes a U.S. federal withholding tax of 30% on certain payments made to a non-financial foreign entity unless such entity provides the withholding agent a certification identifying certain direct and indirect U.S. owners of the entity or an exemption applies. An intergovernmental agreement between the United States and an applicable foreign country may modify these requirements. Under certain circumstances, a non-U.S. holder might be eligible for refunds or credits of such taxes. FATCA currently applies to dividends paid on our common stock. The U.S. Treasury released proposed Treasury Regulations which, if finalized in their present form, would eliminate the federal withholding tax of 30% applicable to the gross proceeds of a sale or other disposition of our common stock. In its preamble to such proposed Treasury Regulations, the U.S. Treasury Department stated that taxpayers may generally rely on the proposed regulations until final regulations are issued.

Prospective investors are encouraged to consult with their own tax advisors regarding the potential implications of FATCA on their investment in our common stock.

UNDERWRITING

Subject to the terms and conditions set forth in the underwriting agreement, dated _____, 2024, among us and Jefferies LLC, TD Securities (USA) LLC and Cantor Fitzgerald & Co., as the representatives of the underwriters named below and the joint book-running managers of this offering, we have agreed to sell to the underwriters, and each of the underwriters has agreed, severally and not jointly, to purchase from us, the respective number of shares of common stock shown opposite its name below:

UNDERWRITER	NUMBER OF SHARES
Jefferies LLC	
TD Securities (USA) LLC	
Cantor Fitzgerald & Co.	
Wedbush Securities Inc.	
Needham & Company, LLC	
Total	

The underwriting agreement provides that the obligations of the several underwriters are subject to certain conditions precedent such as the receipt by the underwriters of officers' certificates and legal opinions and approval of certain legal matters by their counsel. The underwriting agreement provides that the underwriters will purchase all of the shares of common stock if any of them are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. We have agreed to indemnify the underwriters and certain of their controlling persons against certain liabilities, including liabilities under the Securities Act, and to contribute to payments that the underwriters may be required to make in respect of those liabilities.

The underwriters have advised us that, following the completion of this offering, they currently intend to make a market in the common stock as permitted by applicable laws and regulations. However, the underwriters are not obligated to do so, and the underwriters may discontinue any market-making activities at any time without notice in their sole discretion. Accordingly, no assurance can be given as to the liquidity of the trading market for the common stock, that you will be able to sell any of the common stock held by you at a particular time or that the prices that you receive when you sell will be favorable.

The underwriters are offering the shares of common stock subject to their acceptance of the shares of common stock from us and subject to prior sale. The underwriters reserve the right to withdraw, cancel or modify offers to the public and to reject orders in whole or in part.

Commission and Expenses

The underwriters have advised us that they propose to offer the shares of common stock to the public at the initial public offering price set forth on the cover page of this prospectus and to certain dealers, which may include the underwriters, at that price less a concession not in excess of \$ _____ per share of common stock. After the offering, the initial public offering price and concession to dealers may be reduced by the representatives. No such reduction will change the amount of proceeds to be received by us as set forth on the cover page of this prospectus.

[Table of Contents](#)

The following table shows the public offering price, the underwriting discounts and commissions that we are to pay the underwriters and the proceeds, before expenses, to us in connection with this offering. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

	PER SHARE		TOTAL	
	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES	WITHOUT OPTION TO PURCHASE ADDITIONAL SHARES	WITH OPTION TO PURCHASE ADDITIONAL SHARES
Public offering price	\$	\$	\$	\$
Underwriting discounts and commissions paid by us	\$	\$	\$	\$
Proceeds to us, before expenses	\$	\$	\$	\$

We estimate expenses payable by us in connection with this offering, other than the underwriting discounts and commissions referred to above, will be approximately \$. We have agreed to reimburse the underwriters for certain of their expenses, up to \$.

Determination of Offering Price

Prior to this offering, there has not been a public market for our common stock. Consequently, the initial public offering price for our common stock will be determined by negotiations between us and the representatives. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriters believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which the common stock will trade in the public market subsequent to the offering or that an active trading market for the common stock will develop and continue after the offering.

Listing

We have applied to have our common stock listed on the Nasdaq Global Market under the trading symbol "ARTV."

Stamp Taxes

If you purchase shares of common stock offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

Option to Purchase Additional Shares

We have granted to the underwriters an option, exercisable for 30 days from the date of this prospectus, to purchase, from time to time, in whole or in part, up to an aggregate of shares from us at the public offering price set forth on the cover page of this prospectus, less underwriting discounts and commissions. If the underwriters exercise this option, each underwriter will be obligated, subject to specified conditions, to purchase a number of additional shares proportionate to that underwriter's initial purchase commitment as indicated in the table above. This option may be exercised only if the underwriters sell more shares than the total number set forth on the cover page of this prospectus.

No Sales of Similar Securities

We, our officers, directors and holders of all or substantially all of our outstanding capital stock and other securities have agreed, subject to specified exceptions, not to directly or indirectly:

- sell, offer to sell, contract or grant any option to sell (including any short sale), pledge, transfer, establish an open "put equivalent position" within the meaning of Rule 16a-l(h) under the Securities Exchange Act of 1934, as amended, or

[Table of Contents](#)

- otherwise dispose of any shares of common stock, options or warrants to acquire shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock currently or hereafter owned either of record or beneficially, or
- publicly announce an intention to do any of the foregoing for a period of 180 days after the date of this prospectus without the prior written consent of Jefferies LLC and TD Securities (USA) LLC.

This restriction terminates after the close of trading of the common stock on and including the 180th day after the date of this prospectus.

Notwithstanding the foregoing, the securityholder may transfer shares of common stock, or securities exchangeable or exercisable for or convertible into shares of common stock:

- (i) as a *bona fide* gift or gifts;
- (ii) by will or intestacy;
- (iii) to any trust for the direct or indirect benefit of the securityholder or a family member of the securityholder;
- (iv) to any family member of the securityholder;
- (v) by operation of law pursuant to a court order or a settlement agreement related to the distribution of assets in connection with the dissolution of a marriage or civil union;
- (vi) to any corporation, partnership, limited liability company or other entity all of the beneficial ownership interests of which, in each case, are held by the securityholder;
- (vii) if the securityholder is a corporation, partnership, limited liability company, trust or other business entity, in distributions of shares of common stock or any security convertible into or exercisable for shares of common stock to limited partners, limited liability company members or stockholders of the securityholder;
- (viii) to any affiliate of the securityholder, including investment funds or other entities under common control or management that are affiliates of the securityholder;
- (ix) acquired in this initial public offering or in open market transactions on or after the completion of this initial public offering, if the securityholder is not one of our officers or directors;
- (x) to us in connection with the exercise, vesting, exchange or settlement of options, warrants or other rights to acquire shares of common stock, including any security convertible into, exchangeable for or that represent the right to receive shares of common stock, in accordance with their terms (including the vesting or settlement of restricted stock units and including, in each case, by way of net exercise and/or to cover withholding tax obligations in connection with such exercise, vesting, exchange or settlement) pursuant to an employee benefit plan, option, warrant or other right disclosed in this prospectus;
- (xi) to us in connection with (a) the termination of the securityholder's employment with us or (b) pursuant to agreements under which we have the option to repurchase such shares of common stock;
- (xii) upon the exercise of the securityholder's option to purchase any shares of common stock pursuant to either our stock incentive plan or stock purchase plan disclosed in this prospectus, provided that the underlying shares of common stock shall continue to be subject to the lock-up agreement;
- (xiii) upon conversion of any outstanding preferred stock and simple agreements for future equity entered into with us, into shares of common stock, provided that any such shares of common stock received upon such conversions shall continue to be subject to the lock-up agreement, and
- (xiv) any *bona fide* third-party tender offer for our securities, merger, consolidation or other similar transaction made to all holders of the our securities involving a change of control, which transaction is approved by our board of directors, provided that it shall be a condition of the transfer that if the tender offer, merger, consolidation or other such transaction is not completed, the securityholder's securities, which are subject to the lock-up agreement shall remain subject to the restrictions set forth in such lock-up agreement;

[Table of Contents](#)

provided that, in the case of (a) clauses (i)-(viii), that (x) such transfer shall not involve a disposition for value and (y) any such transferee executes and delivers to the representative a lock-up agreement; (b) clauses (vi) through (ix), that no public disclosure nor any filing by any party under Section 16(a) of the Exchange Act, shall be required or shall be made voluntarily in connection with such transfer and (c) clauses (i) through (v) and (x) through (xiii), that (x) no public disclosure nor any filing by any party under Section 16(a) of the Exchange Act, shall be made voluntarily in connection with such transfer and (y) any required filing by any party under Section 16(a) of the Exchange Act shall include a statement in such report indicating the circumstances of such transfer.

In addition, the foregoing restrictions shall not apply to the establishment of any contract, instruction or plan (a "Plan") that satisfies all of the requirements of Rule 10b5-1(c)(1)(i)(B) under the Exchange Act; *provided that* no sales of a securityholder's shares of common stock shall be made pursuant to such a Plan prior to the expiration of the lock-up period, and such Plan may only be established if any required public disclosure, announcement or filing under the Exchange Act made by us or any person regarding the establishment or amendment of such plan during the lock-up period shall include a statement that the securityholder is not permitted to transfer, sell or otherwise dispose of securities under such plan during the lock-up period in contravention of the lock-up agreement, and no such announcement or filing is made voluntarily, by the securityholder, us or any other person, prior to the expiration of the lock-up period.

Jefferies LLC and TD Securities (USA) LLC may, in their sole discretion and at any time or from time to time before the termination of the 180-day period release all or any portion of the securities subject to lock-up agreements. There are no existing agreements between the underwriters and any of our shareholders who will execute a lock-up agreement, providing consent to the sale of shares prior to the expiration of the lock-up period.

Stabilization

The underwriters have advised us that they, pursuant to Regulation M under the Exchange Act, certain persons participating in the offering may engage in short sale transactions, stabilizing transactions, syndicate covering transactions or the imposition of penalty bids in connection with this offering. These activities may have the effect of stabilizing or maintaining the market price of the common stock at a level above that which might otherwise prevail in the open market. Establishing short sales positions may involve either "covered" short sales or "naked" short sales.

"Covered" short sales are sales made in an amount not greater than the underwriters' option to purchase additional shares of our common stock in this offering. The underwriters may close out any covered short position by either exercising their option to purchase additional shares of our common stock or purchasing shares of our common stock in the open market. In determining the source of shares to close out the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase shares through the option to purchase additional shares.

"Naked" short sales are sales in excess of the option to purchase additional shares of our common stock. The underwriters must close out any naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the shares of our common stock in the open market after pricing that could adversely affect investors who purchase in this offering.

A stabilizing bid is a bid for the purchase of shares of common stock on behalf of the underwriters for the purpose of fixing or maintaining the price of the common stock. A syndicate covering transaction is the bid for or the purchase of shares of common stock on behalf of the underwriters to reduce a short position incurred by the underwriters in connection with the offering. Similar to other purchase transactions, the underwriter's purchases to cover the syndicate short sales may have the effect of raising or maintaining the market price of our common stock or preventing or retarding a decline in the market price of our common stock. As a result, the price of our common stock may be higher than the price that might otherwise exist in the open market. A penalty bid is an arrangement permitting the underwriters to reclaim the selling concession otherwise accruing to a syndicate member in connection with the offering if the common stock originally sold by such syndicate member are purchased in a syndicate covering transaction and therefore have not been effectively placed by such syndicate member.

[Table of Contents](#)

Neither we, nor any of the underwriters make any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our common stock. The underwriters are not obligated to engage in these activities and, if commenced, any of the activities may be discontinued at any time.

The underwriters may also engage in passive market making transactions in our common stock on the Nasdaq Global Market in accordance with Rule 103 of Regulation M during a period before the commencement of offers or sales of shares of our common stock in this offering and extending through the completion of distribution. A passive market maker must display its bid at a price not in excess of the highest independent bid of that security. However, if all independent bids are lowered below the passive market maker's bid, that bid must then be lowered when specified purchase limits are exceeded.

Electronic Distribution

A prospectus in electronic format may be made available by e-mail or on the web sites or through online services maintained by one or more of the underwriters or their affiliates. In those cases, prospective investors may view offering terms online and may be allowed to place orders online. The underwriters may agree with us to allocate a specific number of shares of common stock for sale to online brokerage account holders. Any such allocation for online distributions will be made by the underwriters on the same basis as other allocations. Other than the prospectus in electronic format, the information on the underwriters' web sites and any information contained in any other web site maintained by any of the underwriters is not part of this prospectus, has not been approved and/or endorsed by us or the underwriters and should not be relied upon by investors.

Other Activities and Relationships

The underwriters and certain of their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, investment research, principal investment, hedging, financing and brokerage activities. The underwriters and certain of their respective affiliates have, from time to time, performed, and may in the future perform, various commercial and investment banking and financial advisory services for us and our affiliates, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and certain of their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (including bank loans) for their own account and for the accounts of their customers, and such investment and securities activities may involve securities and/or instruments issued by us and our affiliates. If the underwriters or their respective affiliates have a lending relationship with us, they routinely hedge their credit exposure to us consistent with their customary risk management policies. The underwriters and their respective affiliates may hedge such exposure by entering into transactions which consist of either the purchase of credit default swaps or the creation of short positions in our securities or the securities of our affiliates, including potentially the common stock offered hereby. Any such short positions could adversely affect future trading prices of the common stock offered hereby. The underwriters and certain of their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such securities or instruments and may at any time hold, or recommend to clients that they acquire, long and/or short positions in such securities and instruments.

Disclaimers About Non-U.S. Jurisdictions

Canada

(A) Resale Restrictions

The distribution of shares of common stock in Canada is being made only in the provinces of Ontario, Quebec, Alberta and British Columbia on a private placement basis exempt from the requirement that we prepare and file a prospectus with the securities regulatory authorities in each province where trades of these securities are made. Any resale of the shares of common stock in Canada must be made under applicable securities laws which may vary depending on the relevant jurisdiction, and which may require resales to be made under available statutory exemptions or under a discretionary exemption granted by the applicable Canadian securities regulatory authority. Purchasers are advised to seek legal advice prior to any resale of the shares of common stock.

[Table of Contents](#)

(B) Representations of Canadian Purchasers

By purchasing shares of common stock in Canada and accepting delivery of a purchase confirmation, a purchaser is representing to us and the dealer from whom the purchase confirmation is received that:

- the purchaser is entitled under applicable provincial securities laws to purchase the shares of common stock without the benefit of a prospectus qualified under those securities laws as it is an “accredited investor” as defined under National Instrument 45-106 - Prospectus Exemptions or Section 73.3(1) of the Securities Act (Ontario), as applicable,
- the purchaser is a “permitted client” as defined in National Instrument 31-103 - Registration Requirements, Exemptions and Ongoing Registrant Obligations,
- where required by law, the purchaser is purchasing as principal and not as agent, and
- the purchaser has reviewed the text above under Resale Restrictions.

(C) Conflicts of Interest

Canadian purchasers are hereby notified that certain of the underwriters are relying on the exemption set out in section 3A.3 or 3A.4, if applicable, of National Instrument 33-105 - Underwriting Conflicts from having to provide certain conflict of interest disclosure in this prospectus.

(D) Statutory Rights of Action

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if the prospectus (including any amendment thereto) such as this prospectus contains a misrepresentation, *provided that* the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser of these securities in Canada should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

(E) Enforcement of Legal Rights

All of our directors and officers as well as the experts named herein may be located outside of Canada and, as a result, it may not be possible for Canadian purchasers to effect service of process within Canada upon us or those persons. All or a substantial portion of our assets and the assets of those persons may be located outside of Canada and, as a result, it may not be possible to satisfy a judgment against us or those persons in Canada or to enforce a judgment obtained in Canadian courts against us or those persons outside of Canada.

(F) Taxation and Eligibility for Investment

Canadian purchasers of shares of common stock should consult their own legal and tax advisors with respect to the tax consequences of an investment in the shares of common stock in their particular circumstances and about the eligibility of the shares of common stock for investment by the purchaser under relevant Canadian legislation.

(G) Language of Documents

The purchaser confirms its express wish and that it has requested that this document, all documents evidencing or relating to the sale of the securities described herein and all other related documents be drawn up exclusively in the English language. *L'acquéreur confirme sa volonté expresse et qu'il a demandé que le présent document, tous les documents attestant de la vente des titres décrits dans le présent document ou s'y rapportant ainsi que tous les autres documents s'y rattachant soient rédigés exclusivement en langue anglaise.*

Australia

This prospectus is not a disclosure document for the purposes of Australia's Corporations Act 2001 (Cth) of Australia (the Corporations Act), has not been lodged with the Australian Securities & Investments Commission and is only directed to the categories of exempt persons set out below. Accordingly, if you receive this prospectus in Australia:

You confirm and warrant that you are either:

- a “sophisticated investor” under section 708(8)(a) or (b) of the Corporations Act;
- a “sophisticated investor” under section 708(8)(c) or (d) of the Corporations Act and that you have provided an accountant's certificate to the Company which complies with the requirements of section 708(8)(c)(i) or (ii) of the Corporations Act and related regulations before the offer has been made;
- a person associated with the Company under Section 708(12) of the Corporations Act; or
- a “professional investor” within the meaning of section 708(11)(a) or (b) of the Corporations Act.

[Table of Contents](#)

To the extent that you are unable to confirm or warrant that you are an exempt sophisticated investor, associated person or professional investor under the Corporations Act any offer made to you under this prospectus is void and incapable of acceptance.

You warrant and agree that you will not offer any of the securities issued to you pursuant to this prospectus for resale in Australia within 12 months of those securities being issued unless any such resale offer is exempt from the requirement to issue a disclosure document under section 708 of the Corporations Act.

European Economic Area

In relation to each Member State of the European Economic Area (each, a Relevant State), no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares of common stock which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that the shares of common stock may be offered to the public in that Relevant State at any time.

- (a) to any legal entity which is a “qualified investor” as defined under Article 2 of the Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of representatives for any such offer; or
- (c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of the shares of common stock shall require us or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression “offer to the public” in relation to the shares of common stock in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

Hong Kong

No shares of common stock have been offered or sold, and no shares of common stock may be offered or sold, in Hong Kong, by means of any document, other than to persons whose ordinary business is to buy or sell shares or debentures, whether as principal or agent; or to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the SFO), and any rules made under that Ordinance; or in other circumstances which do not result in the document being a “prospectus” as defined in the Companies Ordinance (Cap. 32) of Hong Kong (the CO), or which do not constitute an offer or invitation to the public for the purpose of the CO or the SFO. No document, invitation or advertisement relating to the shares of common stock has been issued or may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted under the securities laws of Hong Kong) other than with respect to shares of common stock which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the SFO and any rules made under that Ordinance.

This prospectus has not been registered with the Registrar of Companies in Hong Kong. Accordingly, this prospectus may not be issued, circulated or distributed in Hong Kong, and the shares of common stock may not be offered for subscription to members of the public in Hong Kong. Each person acquiring the shares of common stock will be required, and is deemed by the acquisition of the shares of common stock, to confirm that he is aware of the restriction on offers of the shares of common stock described in this prospectus and the relevant offering documents and that he is not acquiring, and has not been offered any shares of common stock in circumstances that contravene any such restrictions.

Israel

This prospectus does not constitute a prospectus under the Israeli Securities Law, 5728-1968 (the Securities Law), and has not been filed with or approved by the Israel Securities Authority. In Israel, this prospectus is being distributed only to, and is directed only at, and any offer of the shares of common stock is directed only at, (i) a limited number of persons in accordance with the Israeli Securities Law and (ii) investors listed in the first

[Table of Contents](#)

addendum (the Addendum), to the Israeli Securities Law, consisting primarily of joint investment in trust funds, provident funds, insurance companies, banks, portfolio managers, investment advisors, members of the Tel Aviv Stock Exchange, underwriters, venture capital funds, entities with equity in excess of NIS 50 million and “qualified individuals,” each as defined in the Addendum (as it may be amended from time to time), collectively referred to as qualified investors (in each case, purchasing for their own account or, where permitted under the Addendum, for the accounts of their clients who are investors listed in the Addendum). Qualified investors are required to submit written confirmation that they fall within the scope of the Addendum, are aware of the meaning of same and agree to it.

Japan

The offering has not been and will not be registered under the Financial Instruments and Exchange Law of Japan (Law No. 25 of 1948 of Japan, as amended) (the FIEL), and the underwriters will not offer or sell any securities, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEL and any other applicable laws, regulations, and ministerial guidelines of Japan.

Singapore

This prospectus has not been and will not be lodged or registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the common stock may not be circulated or distributed, nor may the common stock be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor under Section 274 of the Securities and Futures Act, Chapter 289 of Singapore (the SFA), (ii) to a relevant person pursuant to Section 275(1), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares of common stock are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

- (a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or
- (b) a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor,

securities (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares of common stock pursuant to an offer made under Section 275 of the SFA except:

- (i) to an institutional investor or to a relevant person defined in Section 275(2) of the SFA, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (ii) where no consideration is or will be given for the transfer;
- (iii) where the transfer is by operation of law;
- (iv) as specified in Section 276(7) of the SFA; or
- (v) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Switzerland

The shares of common stock may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange (the SIX), or on any other stock exchange or regulated trading facility in Switzerland. This prospectus has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing

[Table of Contents](#)

Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this prospectus nor any other offering or marketing material relating to the securities or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this prospectus nor any other offering or marketing material relating to the offering, us or the securities have been or will be filed with or approved by any Swiss regulatory authority. In particular, this prospectus will not be filed with, and the offer of securities will not be supervised by, the Swiss Financial Market Supervisory Authority (the FINMA), and the offer of securities has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes (the CISA). The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of securities.

United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the Shares which has been approved by the Financial Conduct Authority, except that the shares of common stock may be offered to the public in the United Kingdom at any time:

- (a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;
- (b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or
- (c) in any other circumstances falling within Section 86 of the FSMA,

provided that no such offer of the shares of common stock shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an “offer to the public” in relation to the shares of common stock in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression “UK Prospectus Regulation” means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

LEGAL MATTERS

The validity of the shares of common stock being offered by this prospectus will be passed upon for us by Cooley LLP, San Diego, California. The underwriters are being represented by Latham & Watkins LLP, San Diego, California.

EXPERTS

The financial statements of Artiva Biotherapeutics, Inc. as of December 31, 2022 and 2023 and for the years ended December 31, 2022 and 2023 have been included herein and in the registration statement in reliance upon the report of KPMG LLP, independent registered public accounting firm, appearing elsewhere herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2023 financial statements contains an explanatory paragraph that states that the Company's recurring losses, accumulated deficit and negative cash flows from operations raise substantial doubt about the entity's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of that uncertainty.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act, with respect to the shares of common stock being offered by this prospectus. This prospectus does not contain all of the information in the registration statement and its exhibits. For further information with respect to us and the common stock offered by this prospectus, we refer you to the registration statement and its exhibits. Statements contained in this prospectus as to the contents of any contract or any other document referred to are not necessarily complete, and in each instance, we refer you to the copy of the contract or other document filed as an exhibit to the registration statement. Each of these statements is qualified in all respects by this reference.

You can read our SEC filings, including the registration statement, over the Internet at the SEC's website at www.sec.gov. You may also request a copy of these filings, at no cost, by writing us at 5505 Morehouse Drive, Suite 100, San Diego, CA 92121, or calling us at (858) 267-4467.

Upon the closing of this offering, we will be subject to the information reporting requirements of the Exchange Act, and we will file reports, proxy statements and other information with the SEC. These reports, proxy statements and other information will be available for inspection and copying at the public reference room and website of the SEC referred to above. We also maintain a website at www.artivabio.com, at which, following the closing of this offering, you may access these materials free of charge as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference in, and is not part of, this prospectus.

ARTIVA BIOTHERAPEUTICS, INC.
INDEX TO FINANCIAL STATEMENTS

	<u>PAGE</u>
Audited Financial Statements as of and for the Years Ended December 31, 2022 and 2023	
Report of Independent Registered Public Accounting Firm	F-2
Balance Sheets	F-3
Statements of Operations and Comprehensive Loss	F-4
Statements of Convertible Preferred Stock and Stockholders' Deficit	F-5
Statements of Cash Flows	F-6
Notes to Financial Statements	F-7
 Unaudited Condensed Financial Statements as of December 31, 2023 and March 31, 2024 and for the Three Months Ended March 31, 2023 and 2024	
Condensed Balance Sheets	F-33
Condensed Statements of Operations and Comprehensive Loss	F-34
Condensed Statements of Convertible Preferred Stock and Stockholders' Deficit	F-35
Condensed Statements of Cash Flows	F-36
Notes to Condensed Financial Statements	F-37

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors
Artiva Biotherapeutics, Inc.:

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Artiva Biotherapeutics, Inc. (the Company) as of December 31, 2022 and 2023, the related statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit, and cash flows for the years then ended, and the related notes (collectively, the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2023, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

Going Concern

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has incurred net losses and has an accumulated deficit and negative cash flows from operations that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

We have served as the Company's auditor since 2020.

San Diego, California
May 3, 2024

ARTIVA BIOTHERAPEUTICS, INC.
Balance Sheets
(in thousands, except share and par value data)

	AS OF DECEMBER 31,	
	2022	2023
Assets		
Current assets:		
Cash and cash equivalents	\$ 102,531	\$ 53,504
Short-term investments	—	23,467
Accounts receivable (including related party amounts of \$0 and \$569, respectively)	525	1,034
Other receivables (including related party amounts of \$0 and \$607, respectively)	—	724
Prepaid expenses and other current assets	1,619	1,092
Total current assets	104,675	79,821
Restricted cash	245	258
Property and equipment, net	8,389	8,096
Operating lease right-of-use assets	19,228	16,547
Other long-term assets	517	392
Total assets	<u>\$ 133,054</u>	<u>\$ 105,114</u>
Liabilities, convertible preferred stock, and stockholders' deficit		
Current liabilities:		
Accounts payable (including related party amounts of \$148 and \$199, respectively)	\$ 1,096	\$ 614
Accrued expenses (including related party amounts of \$3,132 and \$2,161, respectively)	10,152	8,017
Current portion of lease liabilities	3,486	3,596
Deferred revenue, current portion	10,891	—
Total current liabilities	25,625	12,227
Lease liabilities, net of current portion	15,962	13,316
Deferred revenue, net of current portion	15,635	—
Simple agreements for future equity ("SAFEs") (including related party amounts of \$0 and \$20,315, respectively)	—	25,100
Other non-current liabilities	115	73
Total liabilities	57,337	50,716
Commitments and contingencies (Note 12)		
Series A convertible preferred stock, \$0.0001 par value; 16,110,463 shares authorized, issued, and outstanding at December 31, 2022 and December 31, 2023; \$80,552 aggregate liquidation preference at December 31, 2022 and December 31, 2023	96,767	96,767
Series B convertible preferred stock, \$0.0001 par value; 10,909,091 shares authorized, issued, and outstanding at December 31, 2022 and December 31, 2023; \$120,000 aggregate liquidation preference at December 31, 2022 and December 31, 2023	119,646	119,646
Stockholders' deficit:		
Common stock, \$0.0001 par value; 38,998,588 shares authorized at December 31, 2022 and December 31, 2023; 3,553,143 and 3,551,690 shares issued as of December 31, 2022 and December 31, 2023, respectively; 3,478,143 and 3,551,690 shares outstanding as of December 31, 2022 and December 31, 2023, respectively	—	—
Additional paid-in capital	11,895	18,988
Accumulated other comprehensive income	—	308
Accumulated deficit	(152,591)	(181,311)
Total stockholders' deficit	(140,696)	(162,015)
Total liabilities, convertible preferred stock and stockholders' deficit	<u>\$ 133,054</u>	<u>\$ 105,114</u>

See accompanying notes to financial statements

ARTIVA BIOTHERAPEUTICS, INC.
Statements of Operations and Comprehensive Loss
(in thousands, except share and per share data)

	YEAR ENDED DECEMBER 31,	
	2022	2023
Revenue:		
Collaboration revenue	\$ 4,931	\$ 32,923
License and development support revenue (including related party amounts of \$0 and \$569, respectively)	—	569
Total revenue	4,931	33,492
Operating expenses:		
Research and development (including related party amounts of \$8,100 and \$3,832, respectively)	43,984	50,251
General and administrative	20,776	13,912
Total operating expenses	64,760	64,163
Loss from operations	(59,829)	(30,671)
Other income:		
Interest income	1,294	2,535
Change in fair value of SAFEs (including related party amounts of \$0 and \$573, respectively)	—	(707)
Other income (expense), net	(200)	195
Total other income, net	1,094	2,023
Loss before provision for income taxes	(58,735)	(28,648)
Provision for income taxes	(53)	(72)
Net loss	\$ (58,788)	\$ (28,720)
Net loss per share, basic and diluted	\$ (17.48)	\$ (8.16)
Weighted-average common shares outstanding, basic and diluted	3,362,922	3,520,935
Comprehensive loss:		
Net loss	\$ (58,788)	\$ (28,720)
Other comprehensive loss:		
Unrealized gain on short-term investments	—	308
Comprehensive loss	\$ (58,788)	\$ (28,412)

See accompanying notes to financial statements

ARTIVA BIOTHERAPEUTICS, INC.
Statements of Convertible Preferred Stock and Stockholders' Deficit
(in thousands, except share data)

	SERIES A CONVERTIBLE PREFERRED STOCK		SERIES B CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE INCOME	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' DEFICIT
	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT				
Balance at December 31, 2021	16,110,463	\$ 96,767	10,909,091	\$ 119,646	3,118,935	\$ —	\$ 4,945	\$ —	\$ (93,803)	\$ (88,858)
Exercise of stock options	—	—	—	—	273,687	—	332	—	—	332
Vesting of shares of common stock subject to repurchase, including early exercise	—	—	—	—	85,521	—	34	—	—	34
Stock-based compensation expense	—	—	—	—	—	—	6,584	—	—	6,584
Net loss	—	—	—	—	—	—	—	—	(58,788)	(58,788)
Balance at December 31, 2022	16,110,463	96,767	10,909,091	119,646	3,478,143	—	11,895	—	(152,591)	(140,696)
Exercise of stock options	—	—	—	—	8,547	—	10	—	—	10
Vesting of shares of common stock subject to repurchase, including early exercise	—	—	—	—	65,000	—	30	—	—	30
Stock-based compensation expense	—	—	—	—	—	—	7,053	—	—	7,053
Unrealized gain on short-term investments	—	—	—	—	—	—	—	308	—	308
Net loss	—	—	—	—	—	—	—	—	(28,720)	(28,720)
Balance at December 31, 2023	16,110,463	\$ 96,767	10,909,091	\$ 119,646	3,551,690	\$ —	\$ 18,988	\$ 308	\$ (181,311)	\$ (162,015)

See accompanying notes to financial statements

ARTIVA BIOTHERAPEUTICS, INC.
Statements of Cash Flows

(in thousands)

	YEAR ENDED DECEMBER 31,	
	2022	2023
Operating activities:		
Net loss	\$ (58,788)	\$ (28,720)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	1,158	2,266
Stock-based compensation	6,584	7,053
Change in fair value of SAFEs (including related party amounts of \$0 and \$573, respectively)	—	707
Write-off of deferred offering costs	4,083	—
Accretion of discounts on short-term investments	—	(456)
Changes in operating assets and liabilities:		
Accounts receivable (including related party amounts of \$0 and \$(569), respectively)	(57)	(510)
Other receivables (including related party amounts of \$0 and \$(607), respectively)	—	(724)
Prepaid expenses and other current assets	(764)	516
Other long-term assets	(121)	139
Accounts payable (including related party amounts of \$148 and \$51, respectively)	190	(408)
Accrued expenses (including related party amounts of \$(2,930) and \$(971), respectively)	(805)	(912)
Other non-current liabilities	74	—
Operating lease right-of-use asset and lease liabilities	63	145
Deferred revenue	(2,446)	(26,526)
Net cash used in operating activities	<u>(50,829)</u>	<u>(47,430)</u>
Investing activities:		
Purchases of property and equipment	(6,299)	(3,258)
Purchases of short-term investments	—	(49,517)
Maturities of short-term investments	—	26,800
Net cash used in investing activities	<u>(6,299)</u>	<u>(25,975)</u>
Financing activities:		
Proceeds from exercise of stock options	332	10
Cash paid for repurchase of unvested shares	(5)	(12)
Cash paid in connection with deferred offering costs	(1,591)	—
Proceeds from issuance of SAFEs (including related party amounts of \$0 and \$19,742, respectively)	—	24,393
Net cash (used in) provided by financing activities	<u>(1,264)</u>	<u>24,391</u>
Net decrease in cash, cash equivalents and restricted cash	(58,392)	(49,014)
Cash, cash equivalents and restricted cash at beginning of period	161,168	102,776
Cash, cash equivalents and restricted cash at end of period	<u>\$ 102,776</u>	<u>\$ 53,762</u>
Reconciliation of cash, cash equivalents and restricted cash to the balance sheet		
Cash and cash equivalents	\$ 102,531	\$ 53,504
Restricted cash	245	258
Total cash, cash equivalents and restricted cash	<u>\$ 102,776</u>	<u>\$ 53,762</u>
Supplemental disclosure of cash flow information:		
Cash paid during the period for:		
Income taxes	\$ —	\$ 83
Supplemental disclosures of noncash activities:		
Property and equipment purchases in accounts payable and accrued liabilities	\$ 1,513	\$ 18
Right-of-use asset obtained in exchange for new operating lease liability	<u>\$ 19,059</u>	<u>\$ —</u>

See accompanying notes to financial statements

NOTES TO FINANCIAL STATEMENTS

1. Organization, Going Concern, and Basis of Presentation

Organization

Artiva Biotherapeutics, Inc. (the “Company”) was incorporated in the State of Delaware on February 14, 2019. The Company is a biopharmaceutical company focused on developing off-the shelf, allogeneic, natural killer (“NK”) cell-based therapies that are effective, safe and accessible for patients with devastating autoimmune diseases and cancers.

From its inception to December 31, 2023, the Company has devoted substantially all of its resources to organizing and staffing the Company, business planning, raising capital, establishing and engaging in collaborations, performing research and development, advancing and scaling up product candidate manufacturing, establishing cold chain delivery logistics, establishing and protecting its intellectual property portfolio, and providing general and administrative support for these activities. The Company’s operations to date have been funded primarily through the issuance and sale of convertible promissory notes, convertible preferred stock and simple agreements for future equity (the “SAFEs”).

Going Concern

The financial statements have been prepared on a going concern basis, which contemplates the realization of assets and settlement of liabilities in the normal course of business, and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or amounts and classification of liabilities that may result from the outcome of this uncertainty.

The Company has incurred net losses and negative cash flows from operations since inception, has a significant accumulated deficit and expects to continue to incur net losses for the foreseeable future. The Company has never generated any revenue from product sales and does not expect to generate any revenues from product sales unless and until it successfully completes development of and obtains regulatory approval for its product candidates, which will not be for several years, if ever. The Company has an accumulated deficit of \$181.3 million as of December 31, 2023. During the year ended December 31, 2023, the Company used \$47.4 million of cash for operating activities. As of December 31, 2023, the Company has \$53.5 million in cash and cash equivalents and \$23.5 million in short-term investments.

Management estimates that based on the Company’s liquidity resources, there is substantial doubt about the Company’s ability to continue as a going concern within 12 months from the date of issuance of the financial statements.

As the Company continues to pursue its business plan, it expects to finance its operations through a combination of public or private equity or debt financings or other capital sources, which may include strategic collaborations and other strategic arrangements with third parties. However, there can be no assurance that any additional financing or strategic transactions will be available to the Company on acceptable terms, if at all. Additionally, if the Company issues equity securities to raise additional funds, its existing stockholders may experience dilution, and the new equity securities may have rights, preferences and privileges senior to those of the Company’s existing shareholders.

Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”). Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification (“ASC”) and Accounting Standards Updates (“ASU”) promulgated by the Financial Accounting Standards Board (“FASB”).

2. Summary of Significant Accounting Policies

Emerging Growth Company Status

The Company is an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act of 2012 (the “JOBS Act”), and may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies. The Company may take advantage of these exemptions up until the last day of the fiscal year following the fifth anniversary of an offering or such earlier time that the Company is no longer an “emerging growth company.” Section 107 of the JOBS Act provides that an “emerging growth company” can take advantage of the extended transition period afforded by the JOBS Act for the implementation of new or revised accounting standards. The Company has elected to use the extended transition period for complying with new or revised accounting standards and as a result of this election, its financial statements may not be comparable to companies that comply with public company effective dates. However, the Company may elect to early adopt any new or revised accounting standards whenever such early adoption is permitted for non-public companies. The Company may take advantage of these exemptions up until the time that it is no longer an emerging growth company.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of expenses during the reporting period. Accounting estimates and management judgments reflected in the financial statements include: revenue recognized, the accrual of research and development expenses, common stock, stock-based compensation, SAFEs and operating lease liabilities. Although these estimates are based on the Company’s knowledge of current events and actions it may undertake in the future, actual results may materially differ from these estimates and assumptions.

Concentration of Credit Risk

Financial instruments which potentially subject the Company to significant concentration of credit risk consist of cash, cash equivalents, and short-term investments. The Company maintains deposits in federally insured financial institutions in excess of federally insured limits. The Company has not experienced any losses in such accounts, and management believes that the Company is not exposed to significant credit risk due to the financial position of the depository institutions in which those deposits are held.

Segment Reporting

The Company operates and manages its business as one operating segment. The Company’s Chief Executive Officer, who is the chief operating decision maker, reviews financial information on an aggregate basis for allocating resources and evaluating financial performance. All long-lived assets are maintained in the United States.

Determination of Fair Value of Certain Liability Instruments

The SAFEs are recorded as a liability in the balance sheets and the Company records subsequent changes in fair value in changes in fair value of SAFEs in the statements of operations and comprehensive loss. Debt issuance costs related to the SAFEs are expensed in the period incurred. Refer to Note 7 for further information on the SAFEs.

Allowance for Credit Losses

For short-term investments in an unrealized loss position, the Company first assesses whether it intends to sell, or is more likely than not that it will be required to sell, the investment before recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell is met, the investment’s amortized cost basis is written down to fair value through earnings. For investments that do not meet the aforementioned criteria, the Company evaluates whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, the Company considers the extent to which fair value is less than amortized cost, any changes in interest rates, and any changes to the rating of the security by a rating agency, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security is compared to the amortized cost basis of the investment. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss exists and an allowance for credit losses is recorded, limited by the amount that the fair value is less than the amortized cost basis. Any impairment that has not been recorded through an allowance for credit losses is recognized in other comprehensive loss.

Fair Value of Financial Instruments

The accounting guidance defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. Fair value is defined as an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, the accounting guidance establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1 – Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2 – Quoted prices for similar assets and liabilities in active markets, quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the asset or liability.

Level 3 – Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported by little or no market activity).

Short-Term Investments

Short-term investments consist of debt securities, classified as available-for-sale securities and have original maturities of greater than three months. The Company has classified all available-for-sale securities as current assets in the balance sheets because these are considered highly liquid securities and are available for use in current operations. The Company carries these securities at fair value and reports unrealized gains and losses as a separate component of accumulated other comprehensive income. The cost of debt securities is adjusted for amortization of purchase premiums and accretion of discounts to maturity. Such amortization and accretion are included in other income, net, in the statements of operations and comprehensive loss. Realized gains and losses on sales of securities are determined using the specific identification method and recorded in other income, net, in the statements of operations and comprehensive loss.

As of December 31, 2022 and 2023, accrued interest receivables on short-term investments were \$0 and \$0.1 million, respectively, and are included in prepaid expenses and other current assets on the Company's balance sheets. The Company does not measure an allowance for credit losses for accrued interest receivables. For the purposes of identifying and measuring an impairment, accrued interest is excluded from both the fair value and amortized cost basis of the short-term investment. Uncollectible accrued interest receivables associated with an impaired debt security are reversed against interest income upon identification of the impairment. No accrued interest receivables were written off during the years ended December 31, 2022 and 2023.

Cash and Cash Equivalents

Cash and cash equivalents include cash in readily available operating accounts, and money market funds. The Company considers all highly liquid investments with an original maturity of three months or less at the date of purchase to be cash equivalents.

Restricted Cash

Restricted cash is comprised of cash that is restricted as to withdrawal or use under the terms of certain contractual agreements. Restricted cash as of December 31, 2022 and 2023, was \$0.2 million and \$0.3 million, respectively, and consisted of collateral for letters of credit related to the Company's lease agreements and is included in non-current assets in the balance sheets (see Note 12).

Property and Equipment, Net

Property and equipment, net is stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets (generally two to five years). The Company capitalizes laboratory equipment used for research and development if it has alternative future use in research and development or otherwise. Upon retirement or sale, the cost of assets disposed and the related accumulated depreciation and amortization are removed from the accounts and any resulting gain or loss is included in loss from operations. Leasehold improvements are stated at cost and depreciated over the shorter of the estimated useful life or remaining lease term.

Impairment of Long-Lived Assets

The Company accounts for the impairment of long-lived assets by reviewing these assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. If circumstances require a long-lived asset or asset group to be tested for possible impairment, the Company first compares undiscounted cash flows expected to be generated by that asset or asset group to its carrying value. If the carrying value of the long-lived asset or asset group is not recoverable on an undiscounted-cash-flow basis, an impairment is recognized to the extent that the carrying value exceeds its fair value. The Company did not recognize impairment losses for the years ended December 31, 2022 or 2023.

Deferred Offering Costs

Deferred offering costs, consisting of legal, accounting and other fees and costs relating to the Company's initial public offering, were capitalized and recorded in the balance sheet in other long-term assets. During the year ended December 31, 2022, the Company recorded a charge to general and administrative expenses totaling \$4.1 million, to write-off the balance of deferred offering costs, following the withdrawal of the Company's related registration statement with the Securities and Exchange Commission on November 1, 2022. As of December 31, 2022 and 2023, no deferred offering costs were recorded in the balance sheets.

Research and Development Expenses and Accrued Research and Development Costs

Research and development expenses include costs to third-party contractors to perform research and development activities, internal related salaries, benefits, stock-based compensation charges for those individuals involved in research and development efforts, and associated overhead expenses. Research and development costs are expensed as incurred.

The Company is required to estimate its expenses resulting from its obligations under contracts with vendors, consultants, and contract research organizations, in connection with conducting research and development activities. The financial terms of these contracts are subject to negotiations, which vary from contract to contract and may result in payment flows that do not match the periods over which materials or services are provided under such contracts. The Company reflects research and development expenses in its financial statements by matching those expenses with the period in which services and efforts are expended, as measured by the timing of various aspects of the preclinical or clinical study or related activities. The Company determines accrual estimates through review of the underlying contracts along with preparation of financial models taking into account discussions with research and other key personnel as to the progress of studies, or other services being conducted. As of December 31, 2023, the Company has had no material differences between its estimates of such expenses and the amounts actually incurred. Nonrefundable advance payments for goods and services, including fees for process development or manufacturing and distribution of clinical supplies that will be used in future research and development activities, are deferred and recognized as expense in the period that the related goods are consumed, or services are performed, or when it is no longer expected that the goods will be delivered, or the services rendered.

Licenses

Upfront payments and other consideration under license agreements are expensed as research and development expense upon receipt of the license, and annual maintenance fees under license agreements are expensed in the period in which they are incurred.

Certain license agreements include milestone payments which are recognized when it becomes probable that the achievement of certain milestones will be met. The Company records this expense as research and development expense in its statements of operations and comprehensive loss.

Patent Costs

The Company expenses all costs as incurred in connection with patent applications (including direct application fees, and the legal and consulting expenses related to making such applications) and such costs are included in general and administrative expenses in the statements of operations and comprehensive loss.

Leases

At the inception of a contractual arrangement, the Company determines whether the contract contains a lease by assessing whether there is an identified asset and whether the contract conveys the right to control the use of the identified asset in exchange for consideration over a period of time. If both criteria are met, the Company records the

[Table of Contents](#)

associated lease liability and corresponding right-of-use ("ROU") asset upon commencement of the lease using the implicit rate or a discount rate based on a credit-adjusted secured borrowing rate commensurate with the term of the lease. The Company additionally evaluates leases at their inception to determine if they are to be accounted for as an operating lease or a finance lease. A lease is accounted for as a finance lease if it meets one of the following five criteria: the lease has a purchase option that is reasonably certain of being exercised, the present value of the future cash flows is substantially all of the fair market value of the underlying asset, the lease term is for a significant portion of the remaining economic life of the underlying asset, the title to the underlying asset transfers at the end of the lease term, or if the underlying asset is of such a specialized nature that it is expected to have no alternative uses to the lessor at the end of the term.

Leases that do not meet the finance lease criteria are accounted for as an operating lease. Operating lease assets represent a right to use an underlying asset for the lease term and operating lease liabilities represent an obligation to make lease payments arising from the lease. Operating lease liabilities with a term greater than one year and their corresponding ROU assets are recognized in the balance sheets at the commencement date of the lease based on the present value of lease payments over the expected lease term. Certain adjustments to the ROU asset may be required for items such as initial direct costs paid or incentives received. As the Company's leases do not typically provide an implicit rate, the Company utilizes the appropriate incremental borrowing rate, determined as the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term and in a similar economic environment. Lease cost is recognized on a straight-line basis over the lease term and variable lease payments are recognized as operating expenses in the period in which the obligation for those payments is incurred. Variable lease payments primarily include common area maintenance, utilities, real estate taxes, insurance, and other operating costs that are passed on from the lessor in proportion to the space leased by the Company. The Company has elected the practical expedient to not separate between lease and non-lease components.

Stock-Based Compensation Expense

Stock-based compensation expense represents the cost of the grant date fair value of employee, officer, director and non-employee stock option grants, estimated in accordance with the applicable accounting guidance, recognized on a straight-line basis over the vesting period. The vesting period generally approximates the expected service period of the awards. The Company recognizes forfeitures as they occur.

The fair value of stock options is estimated using a Black-Scholes valuation model on the date of grant. This method requires certain assumptions be used as inputs, such as the fair value of the underlying common stock, expected term of the option before exercise, expected volatility of the Company's common stock, risk-free interest rate and expected dividend yield. Options granted have a maximum contractual term of 10 years. The Company has limited historical stock option activity and therefore estimates the expected term of stock options granted using the simplified method, which represents the arithmetic average of the original contractual term of the stock option and its weighted-average vesting term. The expected volatility of stock options is based upon the historical volatility of a number of publicly traded companies in similar stages of clinical development, as there is no active trading market for the Company's common stock. The Company will continue to apply this process until a sufficient amount of historical information regarding the volatility of its own stock price becomes available. The risk-free interest rates used are based on the U.S. Treasury yield in effect at the time of grant for zero-coupon U.S. treasury notes with maturities approximately equal to the expected term of the stock options. The Company has historically not declared or paid any dividends and does not currently expect to do so in the foreseeable future, and therefore has estimated the dividend yield to be zero.

The Company classifies stock-based compensation expense in its statements of operations and comprehensive loss in the same way the award recipient's salary and related costs are classified or in which the award recipient's service payments are classified.

Common Stock Valuation

Due to the absence of an active market for the Company's common stock, the Company utilized methodologies, approaches and assumptions consistent with the American Institute of Certified Public Accountants' Audit and Accounting Practice Guide: *Valuation of Privately-Held Company Equity Securities Issued as Compensation* to estimate the fair value of its common stock. In determining the exercise prices for options granted, the Company has considered the fair value of the common stock as of the grant date. The fair value of the common stock has been

[Table of Contents](#)

determined based upon a variety of factors, including valuations the Company's common stock performed by independent third-party valuation specialists; the anticipated capital structure that will directly impact the value of the currently outstanding securities; the Company's results of operations and financial position; the status of the Company's research and development efforts; the composition of, and changes to, the Company's management team and board of directors; the lack of liquidity of the Company's common stock as a private company; the Company's stage of development and business strategy and the material risks related to the Company's business and industry; external market conditions affecting the life sciences and biotechnology industry sectors; U.S. and global economic conditions; the likelihood of achieving a liquidity event for the holders of the Company's common stock, such as an IPO or a sale of the Company, given prevailing market conditions; and the market value and volatility of comparable companies.

Significant changes to the key assumptions underlying the factors used could result in different fair values of common stock at each valuation date.

Collaboration, License, and Development Support Revenue

The Company recognizes revenue from its collaboration, license and development support agreements, in a manner that depicts the transfer of control of a product or a service to a customer and reflects the amount of the consideration the Company is entitled to receive in exchange for such product or service. In doing so, the Company follows a five-step approach: (i) identify the contract with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price; (iv) allocate the transaction price to the performance obligations; and (v) recognize revenue when (or as) the customer obtains control of the product or service. The Company considers the terms of a contract and all relevant facts and circumstances when applying the revenue recognition standard. The Company applies the revenue recognition standard, including the use of any practical expedients, consistently to contracts with similar characteristics and in similar circumstances.

A customer is a party that has entered into a contract with the Company, where the purpose of the contract is to obtain a product or a service that is an output of the Company's ordinary activities in exchange for consideration. To be considered a contract: (i) the contract must be approved (in writing, orally, or in accordance with other customary business practices); (ii) each party's rights regarding the product or the service to be transferred can be identified; (iii) the payment terms for the product or the service to be transferred can be identified; (iv) the contract must have commercial substance (that is, the risk, timing or amount of future cash flows is expected to change as a result of the contract); and (v) it is probable that the Company will collect substantially all of the consideration to which it is entitled to receive in exchange for the transfer of the product or the service.

A performance obligation is defined as a promise to transfer a product or a service to a customer. The Company identifies each promise to transfer a product or a service (or a bundle of products or services, or a series of products and services that are substantially the same and have the same pattern of transfer) that is distinct. A product or a service is distinct if both (i) the customer can benefit from the product or the service either on its own or together with other resources that are readily available to the customer and (ii) the Company's promise to transfer the product or the service to the customer is separately identifiable from other promises in the contract. Each distinct promise to transfer a product or a service is a unit of accounting for revenue recognition. If a promise to transfer a product or a service is not separately identifiable from other promises in the contract, such promises should be combined into a single performance obligation.

The transaction price is the amount of consideration the Company is entitled to receive in exchange for the transfer of control of a product or a service to a customer. To determine the transaction price, the Company considers the existence of any significant financing component, the effects of any variable elements, noncash considerations and consideration payable to the customer. If a significant financing component exists, the transaction price is adjusted for the time value of money. If an element of variability exists, the Company must estimate the consideration it expects to receive and uses that amount as the basis for recognizing revenue as the product or the service is transferred to the customer. There are two methods for determining the amount of variable consideration: (i) the expected value method, which is the sum of probability-weighted amounts in a range of possible consideration amounts; and (ii) the mostly likely amount method, which identifies the single most likely amount in a range of possible consideration amounts. The amount of variable consideration is included in the transaction price to the extent it is probable that a significant reversal of revenue recognized will not occur when the uncertainty associated with the variable consideration is resolved.

[Table of Contents](#)

If a contract has multiple performance obligations, the Company allocates the transaction price to each distinct performance obligation in an amount that reflects the consideration the Company is entitled to receive in exchange for satisfying each distinct performance obligation. For each distinct performance obligation, revenue is recognized when (or as) the Company transfers control of the product or the service applicable to such performance obligation.

Commitments and Contingencies

The Company recognizes a liability with regard to loss contingencies when it believes it is probable a liability has been incurred, and the amount can be reasonably estimated. If some amount within a range of loss appears at the time to be a better estimate than any other amount within the range, the Company accrues that amount. When no amount within the range is a better estimate than any other amount the Company accrues the minimum amount in the range. The Company has not recorded any such liabilities as of December 31, 2022 or 2023.

Income Taxes

The Company accounts for income taxes under the asset and liability method, which requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements. Under this method, deferred tax assets and liabilities are determined on the basis of the differences between the financial statements and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. The effect of a change in tax rates on deferred tax assets and liabilities is recognized in income in the period that includes the enactment date.

The Company recognizes deferred tax assets to the extent that the Company believes these assets are more likely than not to be realized. In making such a determination, management considers all available positive and negative evidence, including future reversals of existing taxable temporary differences, projected future taxable income, tax-planning strategies, and results of recent operations. If management determines that the Company would be able to realize its deferred tax assets in the future in excess of their recorded amount, management would make an adjustment to the deferred tax asset valuation allowance, which would reduce the provision for income taxes.

As of December 31, 2022 and 2023, the Company maintained full valuation allowances against its deferred tax assets as the Company concluded it had not met the “more likely than not” to be realized threshold. Changes in the valuation allowance when they are recognized in the provision for income taxes may result in a change in the estimated annual effective tax rate.

The Company records uncertain tax positions on the basis of a two-step process whereby (i) management determines whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (ii) for those tax positions that meet the more-likely-than-not recognition threshold, management recognizes the largest amount of tax benefit that is more than 50% likely to be realized upon ultimate settlement with the related tax authority. The Company recognizes interest and penalties related to unrecognized tax benefits within the provision for income taxes in the statements of operations and comprehensive loss. Any accrued interest and penalties are included within the related tax liability in the balance sheets. As of December 31, 2023, the Company had no accrued interest or penalties.

Comprehensive Loss

Comprehensive loss consists of net loss in excess of unrealized gains on short-term investments. The Company displays comprehensive loss and its components as part of the statements of operations and comprehensive loss.

Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of common stock outstanding for the period. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock and common stock equivalents outstanding for the period. Common stock equivalents are only included when their effect is dilutive. The Company's potentially dilutive securities include shares of its convertible preferred stock, as well as outstanding stock options and restricted stock units under the Company's equity incentive plan and have been excluded from the computation of diluted net loss per share as they would be anti-dilutive to the net loss per share. For all periods presented, there is no difference in the number of shares used to calculate basic and diluted shares outstanding due to the Company's net loss position.

Table of Contents

The following table sets forth the outstanding potentially dilutive securities that have been excluded in the calculation of diluted net loss per share because their inclusion would be anti-dilutive:

	AS OF DECEMBER 31,	
	2022	2023
Convertible preferred stock	27,019,554	27,019,554
Unvested common stock upon early exercise of stock options	35,000	—
Unvested restricted common stock subject to repurchase	40,000	—
Unvested restricted stock units	98,750	98,750
Options to purchase common stock	6,584,475	5,771,251
SAFEs ⁽¹⁾	—	—
Total	33,777,779	32,889,555

- (1) The contingently convertible SAFEs were not included for purposes of calculating the number of diluted shares outstanding as of December 31, 2023, as the number of dilutive shares is based on a conversion ratio associated with the pricing of a future financing or liquidation event. Therefore, the contingently convertible SAFEs' conversion ratio, and the resulting number of dilutive shares, is not determinable until the contingency is resolved. If the contingency were to have been resolved as of December 31, 2023, the number of anti-dilutive shares that would have been excluded in the calculation of dilutive net loss per share, when applying the respective conversion ratio, is estimated as 24.3 million as of December 31, 2023.

Recently Adopted Accounting Standards

In June 2016, the FASB issued ASU No. 2016-13, *Financial Instruments—Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"), and also issued subsequent amendments to the initial guidance: ASU 2018-19, ASU 2019-04 and ASU 2019-05 (collectively, "Topic 326"). The main objective of this update and amendments is to provide information about the expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date and utilize a methodology that requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. Expected credit losses relating to financial assets measured on an amortized cost basis and available-for-sale debt investments are required to be recorded through an allowance for credit losses. The update limits the recognition of the amount of credit losses for available-for-sale debt investments to the amount by which the carrying value exceeds fair value. The measurement will be based on relevant information, including historical experience, current conditions and reasonable and supportable forecasts that affect the collectability of the reported amount and requires disclosure requirements related to credit risks. The effective date of this update is for fiscal years beginning after December 15, 2022, and interim periods therein. The Company adopted this standard on January 1, 2023, and the adoption of the standard did not have a material impact on its financial statements.

Recently Issued Accounting Standards Not Yet Adopted

In August 2020, the FASB issued ASU No. 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity* ("ASU 2020-06"). ASU 2020-06 was issued to reduce the complexity associated with accounting for certain financial instruments with characteristics of liabilities and equity. ASU 2020-06 reduces the number of accounting models for convertible debt instruments and redeemable convertible preferred stock and improves the disclosures for convertible instruments and related earnings per share guidance. ASU 2020-06 also amends the guidance for the derivatives scope exception for contracts in an entity's own equity and improves and amends the related earnings per share guidance. For public entities that qualify as a filer with the Securities and Exchange Commission, excluding entities eligible to be smaller reporting companies, ASU 2020-06 is effective for fiscal annual periods beginning after December 15, 2021, including interim periods within those fiscal years. For nonpublic entities, ASU 2020-06 is effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. ASU 2020-06 must be adopted as of the beginning of a Company's annual fiscal year. ASU 2020-06 may be

[Table of Contents](#)

adopted through either a modified retrospective method of transition or a fully retrospective method of transition. The Company is currently evaluating the impact that this standard will have on the related disclosures in its financial statements.

In November 2023, the FASB issued ASU 2023-07, *Segment Reporting—Improvements to Reportable Segment Disclosures* (“ASU 2023-07”). The update requires entities to disclose their significant segment expense categories and amounts for each reportable segment. Significance is assessed using both quantitative and qualitative factors depending on the facts and circumstances. ASU 2023-07 is effective for fiscal years beginning after December 15, 2023, and interim periods in fiscal years beginning after December 15, 2024. The Company is currently evaluating the impact that this standard will have on the related disclosures in its financial statements.

In December 2023, the FASB issued ASU 2023-09, *Improvements to Income Tax Disclosures* (“ASU 2023-09”). The update requires enhanced disclosures on income taxes paid, adds disaggregation of continuing operations before income taxes between foreign and domestic earnings and defines specific categories for the reconciliation of jurisdictional tax rate to effective tax rate. ASU 2023-09 is effective for fiscal years beginning after December 15, 2024, and can be applied on a prospective basis. The Company is currently evaluating the impact that this standard will have on the related disclosures in its financial statements.

3. Fair Value Measurements

The following table presents information about the Company's financial assets and liabilities that are measured at fair value on a recurring basis and indicates their respective levels within the fair value hierarchy (in thousands):

		AS OF DECEMBER 31, 2022			
	CLASSIFICATION	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets					
Money market funds	Cash and cash equivalents	\$96,447	\$96,447	\$ —	\$ —
Total assets		<u>\$96,447</u>	<u>\$96,447</u>	<u>\$ —</u>	<u>\$ —</u>
		AS OF DECEMBER 31, 2023			
	CLASSIFICATION	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets					
Money market funds	Cash and cash equivalents	\$28,517	\$28,517	\$ —	\$ —
Commercial paper	Short-term investments	2,090	—	2,090	—
Government and government agency bonds	Short-term investments	19,982	—	19,982	—
Corporate bonds	Short-term investments	1,395	—	1,395	—
Total assets		<u>\$51,984</u>	<u>\$28,517</u>	<u>\$23,467</u>	<u>\$ —</u>
Liabilities					
SAFEs	Liabilities	\$25,100	\$ —	\$ —	\$25,100
Total liabilities		<u>\$25,100</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$25,100</u>

The carrying amounts of all cash and cash equivalents, accounts receivable, other receivable, prepaid and other current assets, accounts payable, and accrued expenses are considered to be representative of their respective fair values because of the short-term nature of those instruments.

Short-Term Investments

The Company's assets with a fair value categorized as Level 2 within the fair value hierarchy consist of commercial paper, government and government agency bonds, and corporate bonds. These assets have been initially valued at

[Table of Contents](#)

the transaction price and subsequently valued at the end of each reporting period utilizing third-party pricing services. The pricing services utilize industry standard valuation models whereby all significant inputs, including benchmark yields, reported trades, broker/dealer quotes, issuer spreads, bids, offers, or other market-related data, are observable.

Simple Agreements for Future Equity

The estimated fair value of the SAFEs (see Note 7) is determined based on the aggregated, probability-weighted average of the outcomes of certain scenarios, including: (i) equity financing, with conversion of the SAFEs into a number of shares of convertible preferred stock at the lower of post-money valuation cap price of \$11.00 and discount price (lowest price of the standard convertible preferred stock sold in the equity financing multiplied by the specified discount rate of 85%); (ii) liquidity event (change of control, direct listing, or an initial public offering) with mandatory conversion to common stock at the lower of post-money valuation cap of \$11.00 and discount price (price of the common stock multiplied by the discount rate of 85%); and (iii) dissolution event, with SAFE holders automatically entitled to receive cash payments equal to the purchase amount, prior to and in preference to any distribution of any assets or surplus funds to the holders of convertible preferred and common stock. The combined value of the probability-weighted average of those outcomes is then discounted back to each reporting period in which the SAFEs are outstanding, in each case based on a risk-adjusted discount rate estimated based on the implied interest rate using the changes in observed interest rates of corporate debt that the Company believes is appropriate for those probability-adjusted cash flows.

Fair value measurements associated with SAFEs were determined based on significant inputs not observable in the market, which represent Level 3 measurements within the fair value hierarchy. Increases and decreases in the fair value of the SAFEs can result from updates to assumptions such as expected timing and probability of a qualified financing event, or changes in discount rates, among other assumptions. Based on management's assessment of the valuation of the SAFEs, performed by the Company's third-party valuation specialists, none of the changes in the fair value of those instruments were due to changes in the Company's own credit risk for the reporting periods presented. Judgement is used in determining these assumptions as of the initial valuation date and at each subsequent reporting period. Changes or updates to assumptions could have a material impact on the reported fair value, and the change in fair value of SAFEs and the results of operations in any given period.

The following table summarizes the significant inputs not observable in the market upon which the fair value measurements associated with the SAFEs were determined:

	VALUATION TECHNIQUE	UNOBSERVABLE INPUT	AS OF DECEMBER 31, 2023
Liabilities			
SAFES	Scenario-based approach	Probability weighting	15.0% - 70.0%
		Discount rate	20.1%
		Remaining term to event (in years)	0.50 - 0.75

The following table summarizes the changes in fair value associated with Level 3 financial instruments held at the beginning or end of the periods presented (in thousands):

	SAFES
Balance at December 31, 2022	\$ —
Proceeds from issuance of SAFES	24,393
Changes in fair value of SAFES	707
Balance at December 31, 2023	<u>\$25,100</u>

There were no transfers to or from Level 3 during any of the periods presented.

4. Cash, Cash Equivalents and Short-term Investments

It is the Company's policy to mitigate credit risk in its financial assets by maintaining a well-diversified portfolio that limits the amount of exposure as to maturity and investment type. The Company did not hold any short-term investments classified as available-for-sale securities as of December 31, 2022. The weighted average maturity of the Company's available-for-sale investments as of December 31, 2023, was approximately two months, with all investments having maturity dates of less than one year.

The following table summarizes the Company's cash, cash equivalents and short-term investments for each of the periods presented (in thousands):

		AS OF DECEMBER 31, 2022			
	CLASSIFICATION	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR MARKET VALUE
Cash and money market funds	Cash and cash equivalents	\$ 102,531	\$ —	\$ —	\$102,531
Total cash and cash equivalents		<u>\$ 102,531</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$102,531</u>

		AS OF DECEMBER 31, 2023			
	CLASSIFICATION	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR MARKET VALUE
Cash and money market funds	Cash and cash equivalents	\$ 53,504	\$ —	\$ —	\$53,504
Commercial paper	Short-term investments	2,048	42	—	2,090
Government and government agency bonds	Short-term investments	19,728	254	—	19,982
Corporate bonds	Short-term investments	1,383	12	—	1,395
Total cash, cash equivalents and short-term investments		<u>\$ 76,663</u>	<u>\$ 308</u>	<u>\$ —</u>	<u>\$76,971</u>

As of December 31, 2023, the Company did not have any short-term investments with gross unrealized losses. The Company does not intend to sell the investments and it is not more likely than not that the Company will be required to sell the investments before recovery of their amortized cost basis. As of December 31, 2023, no allowance for credit losses was recorded.

5. Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

	AS OF DECEMBER 31,	
	2022	2023
Lab equipment	\$ 7,899	\$ 9,760
Furniture and fixtures	897	871
Computers and software	570	607
Leasehold improvements	283	390
	<u>9,654</u>	<u>11,628</u>
Less accumulated depreciation	(1,265)	(3,532)
Total property and equipment, net	<u>\$ 8,389</u>	<u>\$ 8,096</u>

The Company recognized approximately \$1.2 million and \$2.3 million in depreciation expense for the years ended December 31, 2022 and 2023, respectively.

6. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	AS OF DECEMBER 31,	
	2022	2023
Accrued research and development expenses	\$ 3,780	\$ 2,861
Accrued payroll and other employee benefits	4,172	4,047
Other accrued expenses	2,200	1,109
Total accrued expenses	<u>\$ 10,152</u>	<u>\$ 8,017</u>

7. Simple Agreement for Future Equity

During the year ended December 31, 2023, the Company entered into SAFEs with various existing investors and related parties with aggregate gross proceeds of \$24.4 million. The SAFEs granted investors with rights to participate in a future equity financing. The SAFEs have no maturity dates and bear no interest. Upon an equity financing, the SAFEs will automatically convert into the type of stock issued in the financing at a per share conversion price equal to the greater of (i) the purchase amount of the SAFEs divided by the post-money valuation cap price of \$11.00 per share, or (ii) the purchase amount of the SAFEs divided by the 85% per share price paid by investors in the financing. Upon an initial public offering, the SAFEs will automatically convert into shares of common stock equal to the purchase amount of the SAFE divided by discount price (the lower of (a) the price per share of common stock sold to the public by the underwriters in the initial public offering multiplied by the discount rate of 85% or (b) the post-money valuation cap price of \$11.00). Other conversion events include liquidity events (a change of control, direct listing or initial public offering). Upon a liquidity event, each investor will automatically be entitled to receive a portion of proceeds equal to the greater of (i) the purchase amounts of the SAFEs, or (ii) the amount payable in the number of common shares equal to the purchase amount of the SAFEs divided by the 85% per share price. Upon a dissolution event and to the extent sufficient funds are available, the holders of SAFEs shall be entitled to receive cash payments equal to the purchase amount, prior to and in preference to any distribution of any assets or surplus funds to the holders of convertible preferred and common stock.

8. Collaboration, Option, and License Agreements

The Company has entered into several agreements with GC Cell and related entities concerning its NK cell therapy platform and manufacturing of its core products, as described below.

Option and License Agreement with GC Cell

In September 2019, the Company entered into an option and license agreement with GC Cell, formerly Green Cross Cell Corporation, as amended in June 2020 and February 2022 (the "Core Agreement"). Under the Core Agreement, GC Cell granted the Company an exclusive, royalty-bearing license, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell relating to non-genetically modified and genetically modified NK cells, and culturing, engineering, manufacturing thereof, to research, develop, manufacture, and commercialize NK cell pharmaceutical products in the Artiva Territory, which is anywhere in the world except for Asia, Australia, and New Zealand. GC Cell retained rights under the license to allow it and its affiliates to perform obligations under the Core Agreement and other agreements between the Company and them.

Under the Core Agreement, GC Cell agreed to conduct a discovery, research, preclinical development, and manufacturing program under a plan approved by a Joint Steering Committee ("the JSC"), to generate and identify product candidates for nomination as option candidates. GC Cell will bear all costs for its work under the R&D Plan, except that the Company will bear all costs for completing IND-enabling activities performed by GC Cell on behalf of the Company, other than certain efficacy studies.

For each product candidate determined by the JSC to be an option candidate, the Company has an exclusive option under the Core Agreement to obtain an exclusive, sublicensable license to research, develop, manufacture and commercialize such candidate in the Artiva Territory for any therapeutic, prophylactic or diagnostic uses in humans,

Table of Contents

on economic terms to be determined in good faith by the parties. GC Cell retains exclusive rights to the licensed technology in Asia, Australia, and New Zealand, though the Company has the right to request, and GC Cell has agreed to consider in good faith, inclusion of Australia, New Zealand, and/or specific countries in Asia in the Artiva Territory on a product-by-product basis. If the Company elects not to exercise the option with respect to a particular option candidate, GC Cell retains the right to continue development of such candidate. As of December 31, 2023, the Company has exercised its rights to license four option candidates, AB-101, AB-201, AB-202, and AB-205, as described below.

The Company has control over and will bear the costs of the development, regulatory, manufacturing, and commercialization activities relating to the option candidates for which it has exercised its option, each a licensed product. Accordingly, the Company has certain diligence obligations and must use commercially reasonable efforts to develop and seek regulatory approval for each licensed product in at least one indication in the United States and the European Union, and following regulatory approval in a country, to commercialize such licensed product in at least one indication in such country. The Core Agreement provides that the Company has the right to engage GC Cell or its appropriate affiliate to provide research and manufacturing services for the licensed products being developed by the Company in the Artiva Territory under separately executed service agreements.

Under the Core Agreement, the Company is obligated to pay a low single-digit percentage royalty on net sales of any licensed products, the manufacture, use or sale of which is claimed by or uses any Core IP. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. The Company also has the exclusive option to extend its license to the Core IP to be worldwide with respect to products originated from the Company in exchange for a specified increase in the applicable royalty. GC Cell is also obligated to pay the Company a royalty at a rate equal to 50% of the royalty payable by the Company for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. The Company has not recognized any net sales royalties under this agreement to-date.

AB-101 Selected Product License Agreement

In November 2019, the Company entered into a license agreement with GC Cell for its AB-101 product candidate, as amended in February 2022 ("the AB-101 Agreement"). AB-101 is the first product for which the Company exercised its option under the Core Agreement. Under the AB-101 Agreement, GC Cell granted the Company an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture, and commercialize AB-101.

Under the AB-101 Agreement, the Company is obligated to pay tiered royalties in the low-mid to high single-digit percentage range on annual net sales of any licensed AB-101 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-101 product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. The Company is also obligated to make milestone payments to GC Cell of: (1) up to \$22.0 million upon the first achievement of certain development milestones; and (2) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay the Company a royalty at a rate equal to 50% of the royalty payable by the Company for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-101 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. The Company has not recognized any net sales royalties or milestones under this agreement to-date.

AB-201 Selected Product License Agreement

In October 2020, the Company entered into a license agreement with GC Cell for its AB-201 product candidate, as amended in February 2022 ("the AB-201 Agreement"). AB-201 is the second product for which the Company

[Table of Contents](#)

exercised its option under the Core Agreement. Under the AB-201 Agreement, GC Cell granted the Company an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture, and commercialize AB-201.

Under the AB-201 Agreement, the Company paid a one-time, upfront fee of \$0.3 million, as reimbursement of certain costs previously incurred by GC Cell relating to AB-201. The Company is obligated to pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-201 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-201 product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. The Company is also obligated to make milestone payments to GC Cell of: (1) up to \$25.0 million upon the first achievement of certain development milestones; and (2) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay the Company a royalty at a rate equal to 50% of the royalty payable by the Company for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-201 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property.

In September 2023, the Company entered an amendment to the AB-201 Agreement ("the Amended AB-201 Agreement"). This amendment granted back GC Cell an exclusive, royalty and milestone bearing license to all information and patents controlled by the Company that relate specifically to the research, development, manufacture and use of AB-201, to be used outside of the Artiva Territory. Under the Amended AB-201 Agreement, the Company will receive tiered royalties in the low single-digit percentage range on annual GC Cell net sales of AB-201 outside of the Artiva Territory. The royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of AB-201 outside of the Artiva Territory and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. The Company will also receive milestone payments upon achievement of certain development milestones, totaling \$1.8 million. In December 2023, GC Cell achieved the first regulatory milestone under the Amended AB-201 Agreement for first IND acceptance for AB-201 outside the Artiva Territory.

During the year ended December 31, 2023, the Company recognized \$0.6 million of license and development support-related revenue in the statements of operations and comprehensive loss, related to GC Cell's achievement of a defined development milestone and development support activities under the Amended AB-201 Agreement. As of December 31, 2023, total accounts receivable related to the Amended AB-201 Agreement was \$0.6 million.

AB-205 Selected Product License Agreement

In December 2022, the Company entered into a license agreement with GC Cell for its AB-205 product candidate ("the AB-205 Agreement"). AB-205 is the fourth product for which the Company exercised its option under the Core Agreement. Under the AB-205 Agreement, GC Cell granted the Company an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture, and commercialize AB-205.

Under the AB-205 Agreement, the Company paid to GC Cell a one-time, upfront payment of \$1.0 million, recognized as research and development expense in the statements of operations and comprehensive loss in 2022 and is also obligated to pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-205 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-205 product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. Upon election by the Company to proceed with clinical development of AB-205 (prior to which Artiva may not make, use or sell AB-205 for clinical development purposes), the Company is obligated to pay a one-time payment of \$2.5 million to GC Cell. Thereafter, the Company is also obligated to make milestone payments to GC Cell of: (i) up to

[Table of Contents](#)

\$29.5 million upon the first achievement of certain development milestones, excluding any payments for the Development Cost Share as defined in the AB-205 Agreement; and (ii) up to \$28.0 million upon the first achievement of certain sales milestones. As of December 31, 2023, the Company has not recognized any net sales royalties or milestones under this agreement.

Total reimbursements for development costs invoiced to GC Cell in connection with the AB-205 License Agreement for the years ended December 31, 2022 and 2023, were \$0 and \$1.6 million, respectively. During the year ended December 31, 2023, the Company received payments totaling \$1.0 million from GC Cell and had \$0.6 million recorded in the balance sheets as other receivable as of December 31, 2023.

Research Services Agreement with GC Cell

As contemplated by the Core Agreement, in August 2020 the Company entered into the GC Cell Research Services Agreement, as amended in February 2022, under which GC Cell agreed to provide research services in support of the research and development of one or more of the products the Company has licensed from GC Cell.

The Agreement provides that the parties will agree to specific projects as work orders under the GC Cell Research Services Agreement. Each work order shall set forth, upon terms mutually agreeable to GC Cell and the Company, the specific services to be performed by GC Cell, the timeline and schedule for the performance of the services, and the compensation to be paid by the Company to GC Cell for the provision of such services, as well as any other relevant terms and conditions (see Note 11).

Master Manufacturing Agreement with GC Cell

In March 2020, the Company entered into a Master Agreement for Manufacturing Services ("the Manufacturing Agreement") with GC Cell, under which GC Cell agreed to manufacture specified products under individual work orders for use in the Company's Phase 1 and Phase 2 clinical trials. Each work order will contain an estimated budget of service fees and out-of-pocket costs to be incurred in the performance of services under the agreement and the work order, as well as additional terms and conditions relating to the estimated budget. The Company will own all results and data generated by GC Cell under the Manufacturing Agreement (see Note 11).

Merck Exclusive License and Collaboration Agreement

In January 2021, the Company entered into the Exclusive License and Research Collaboration Agreement ("the Merck Collaboration Agreement") with Merck Sharp & Dohme Corp. ("Merck"). for the discovery, development, manufacture and commercialization of CAR-NK cells that target certain solid tumor antigens. Merck paid the Company \$30.0 million upfront for two target programs under the Merck Collaboration Agreement. The Company is also eligible to receive additional payments for achieving certain development, regulatory approval and sales milestones, as well as royalties on net sales. In addition, the Company will be reimbursed on for the conduct of each research program, including external research costs and manufacture and supply of clinical material for Phase 1 clinical trials.

Concurrent with entering into the Merck Collaboration Agreement, the Company also entered into an agreement with GC Cell to obtain exclusive, worldwide rights to GC Cell's CAR-NK technology with respect to the licensed products and to engage GC Cell to perform services in support of the research programs ("Partnered Program License Agreement"). The Company agreed to reimburse GC Cell for research and development services as these services were provided. The Company was required to pay GC Cell 100% of regulatory milestones, sales milestones and royalty payments received by Merck relating to products in Asia, Australia and New Zealand and 50% of upfront payments, license fees, regulatory milestones, sales milestones and royalty payments received by Merck relating to products in all other territories.

In October 2023, the Merck Collaboration Agreement and development thereunder was terminated by Merck.

The Company applied ASC 808 to the Merck Collaboration Agreement and determined that the agreements were applicable to such guidance. The Company concluded that Merck represented a customer and applied relevant guidance from ASC 606 to account for the Merck Collaboration Agreement. In accordance with this guidance, the Company identified its performance obligations, including its grant of a license to Merck to certain of its intellectual property subject to certain conditions, transfer of technology, its conduct of research services, and its participation in a joint research committee. The Company determined that its grant of a license to Merck to certain of its

[Table of Contents](#)

intellectual property subject to certain conditions was not distinct from other performance obligations because such grant is dependent on the conduct and results of the research services.

Additionally, the Company determined that its conduct of research services was not distinct from other performance obligations since the research could not be conducted without also delivering the rights to the license, developed intellectual property and technology transfer. Accordingly, the Company determined that all performance obligations should be accounted for as one combined performance obligation for each target program, and that the combined performance obligation is transferred over the expected term of the conduct of the research services, which is collectively estimated to be four years, which represents the combined terms for the research programs ("Expected Research Term").

The Company assessed the upfront, non-refundable and non-creditable payment of \$30.0 million received in January 2021 and concluded that there was not a significant financing component to the Merck Collaboration Agreement.

The Company also assessed the effects of the variable consideration under the Collaboration Agreement. Such assessment evaluated, among other things, the likelihood of receiving: (i) various clinical, regulatory and commercial milestone payments; and (ii) royalties on net sales. Based on its assessment, the Company concluded that given the substantial uncertainty related to their achievement, such variable consideration was not included in the transaction price.

In accordance with ASC 606, the Company determined that the initial transaction price under the Collaboration Agreement equaled \$58.0 million, consisting of the upfront, non-refundable and non-creditable payment of \$30.0 million and the aggregate estimated research and development fees of \$28.0 million. The initial transaction price was allocated evenly to each of the two product targets. The upfront payment of \$30.0 million was recorded as deferred revenue, and was recognized as revenue over the Expected Research Term as the research services were the primary component of the combined performance obligations. Revenue associated with the upfront payment was recognized based on actual costs incurred as a percentage of the estimated total costs expected to be incurred over the Expected Research.

The Company assessed the payments made to GC Cell in connection with the Partnered Program License Agreement and concluded that all payments received from Merck and paid to GC Cell should be reflected within the Company's financial statements on a gross basis. The Company recognized payments from Merck as Collaboration Revenue as the performance obligation was satisfied over time, and payments made to GC Cell were recognized as research and development expense, as incurred.

Total revenue recognized under the Merck Collaboration Agreement for the year ended December 31, 2022, was \$4.9 million, comprised of \$2.4 million associated with amortization of the upfront fee, and \$2.5 million associated with reimbursable research services. Total revenue recognized under the Merck Collaboration Agreement for the year ended December 31, 2023, was \$32.9 million, comprised of \$26.5 million associated with the remaining amortization of the upfront fee as a result of the termination of the agreement, and \$6.4 million associated with reimbursable research services. As of December 31, 2022, aggregate deferred revenue related to the Merck Collaboration Agreement was \$26.5 million, of which \$10.9 million was classified as current. As of December 31, 2023, there was no deferred revenue related to the Merck Collaboration Agreement. Over the course of the Merck Collaboration Agreement through December 31, 2023, the Company received \$39.4 million in payments from Merck, of which \$30.0 million related to the upfront fee, and \$9.4 million related to reimbursable research services. As of December 31, 2022 and 2023, there was \$0.3 million and \$0.5 million, respectively, included in accounts receivable related to reimbursable research services.

Affirmed Collaboration Agreement

On November 1, 2022, the Company entered into a strategic collaboration agreement with Affirmed GmbH, a subsidiary of Affirmed N.V. for the clinical development and commercialization of a combination therapy, for any uses in humans or animals, comprising Affirmed's product consisting of an innate cell engager referred to as "AFM13" and the Company's product containing an NK cell referred to as AB-101. While the collaboration is initially limited to the United States, the parties will, upon Affirmed's request, in good faith discuss an expansion to certain other territories.

[Table of Contents](#)

The Company has granted Affimed, with respect to the development of the combination therapy an exclusive, and with respect to the promotion of the combination therapy under the Affimed Collaboration Agreement a non-exclusive, non-transferable (except to affiliates and successors in interest), royalty-free and non-sublicensable (with certain exceptions) license under relevant Company patents and know-how. Affimed has granted the Company a non-exclusive, non-transferable (except to affiliates and successors in interest), royalty-free license and non-sublicensable (with certain exceptions) license under relevant Affimed patents and know-how for use in the clinical development of the combination therapy under the Affimed Collaboration Agreement.

The financial terms of the Affimed Collaboration Agreement provides that Affimed shall be responsible for all costs associated with the development of the combination therapy (including all clinical trial costs), except that Affimed and the Company shall each bear 50% of the costs and expenses incurred in connection with the performance of any confirmatory combination therapy clinical trial required by the FDA. The Company shall be solely responsible for all costs incurred by the Company for the supply of AB-101 and IL-2 product used in the clinical trials for the combination therapy, and for carrying out activities assigned to it under the agreed development plan. In addition, under the Affimed Collaboration Agreement, the parties agree to make payments to each other to achieve a proportion of 67%/33% (Affimed/Company) of revenues generated by both parties from commercial sales of each party's product as part of the combination therapy.

During the years ended December 31, 2022 and 2023, the Company incurred \$0 and \$0.9 million in expenses in connection with the Affimed Collaboration Agreement, respectively.

9. Convertible Preferred Stock and Stockholders' Deficit

Stockholders' Deficit

Under the Amended and Restated Certificate of Incorporation dated September 1, 2022, the Company had a total of 66,018,142 shares of capital stock authorized for issuance, consisting of 38,998,588 shares of common stock, par value of \$0.0001 per share, and 27,019,554 shares of convertible preferred stock, par value of \$0.0001 per share. The Amended and Restated Certificate of Incorporation included the authorization of 370,865 shares reserved under the terms specified as part of the Company's Pledge 1% Movement commitment, in support of its corporate social responsibility and philanthropic pursuits.

Convertible Preferred Stock

In 2020 and 2021, the Company issued 9,110,463 shares and 7,000,000 shares, respectively, of Series A convertible preferred stock at a price of \$5.00 per share, resulting in aggregate gross proceeds of \$70.0 million and total issuance costs of \$0.4 million. The Company converted a promissory note with a fair value of \$10.6 million as part of the first closing and reclassified a convertible preferred stock purchase right liability with a fair value of \$23.7 million into equity as part of the second closing.

In 2021, the Company issued 10,909,091 shares of Series B convertible preferred stock at a price of \$11.00 per share resulting in aggregate gross proceeds of \$120.0 million and incurred \$0.4 million of total issuance costs.

As of December 31, 2023, the Company's Series A and Series B convertible preferred stock has been classified as temporary equity in the accompanying balance sheets given that the holders of the convertible preferred stock could cause certain events to occur that are outside of the Company's control whereby the Company could be obligated to redeem the convertible preferred stock. The carrying value of the convertible preferred stock is not adjusted to the redemption value until the contingent redemption events are considered to be probable of occurring.

The Company's convertible preferred stock has the following rights, preferences and privileges:

Dividends

The Company shall not declare, pay or set aside any dividends on shares of any class of capital stock of the Company unless the holders of the Series A or Series B convertible preferred stock shall first receive, or simultaneously receive, a dividend on each outstanding share of the Series A convertible preferred stock equal to an amount as defined in the Company's Amended and Restated Certificate of Incorporation. No such dividends have been declared or paid through December 31, 2023.

[Table of Contents](#)

Preferences on Liquidation

The holders of the Series A convertible preferred stock are entitled to receive liquidation preferences, in the event of a change in control, at an amount per share equal to the greater of (i) the Series A original issuance price of \$5.00, plus any dividends declared but unpaid or (ii) such amount per share as would have been payable had all shares of Series A convertible preferred stock been converted into common stock. The holders of the Series B convertible preferred stock are entitled to receive liquidation preferences, in the event of a change in control, at an amount per share equal to the greater of (1) the Series B original issuance price of \$11.00, plus any dividends declared but unpaid or (2) such amount per share as would have been payable had all shares of Series B convertible preferred stock been converted into common stock. Liquidation payments to the holders of the Series A and Series B convertible preferred stock have priority and are made in preference to any payments to the holders of common stock.

After full payment of the liquidation preference to the holders of the Series A and Series B convertible preferred stock, the remaining assets, if any, will be distributed ratably to the holders of the common stock.

Conversion Rights

The shares of Series A and Series B convertible preferred stock are convertible into an equal number of shares of common stock, at the option of the holder, subject to certain anti-dilution adjustments. The conversion rate for the convertible preferred stock is determined by dividing the original issue price by the conversion price. The conversion price is initially the original issue price, but is subject to adjustment for dividends, stock splits, and other distributions. The conversion rate at December 31, 2023, for the Series A and Series B convertible preferred stock was 1:1.

Each share of Series A convertible preferred stock will be automatically converted into common stock at the then effective conversion rate upon: (i) the closing of the sale of common stock to the public at a price of at least \$10.00 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$75,000,000 of gross proceeds to the Company; or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of 60% of the outstanding shares of Series A convertible preferred stock. Each share of Series B convertible preferred stock will be automatically converted into common stock at the then effective conversion rate upon: (1) the closing of the sale of Common Stock to the public (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement Securities Act of 1933, as amended, resulting in at least \$75.0 million of gross proceeds to the Company; or (2) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of 60% of the outstanding shares of Series B convertible preferred stock.

Redemption Rights

The holders of Series A and Series B convertible preferred stock do not have any redemption rights, except upon certain liquidation events that are outside of the Company's control.

Voting

The holder of each share of Series A and Series B convertible preferred stock generally vote together with the shares of common stock as a single class, but also have class vote approval rights as provided by the Company's certificate of incorporation or as required by applicable law.

Common Stock

The voting, dividend, and liquidation rights of the holders of the common stock are subject to, and qualified by, the rights, preferences and privileges of the holders of the Series A and Series B convertible preferred stock. The holders of the common stock are entitled to one vote for each share of common stock held at all meetings of stockholders.

[Table of Contents](#)

Common stock reserved for future issuance consisted of the following:

	AS OF DECEMBER 31,	
	2022	2023
Convertible preferred stock	27,019,554	27,019,554
Common stock options granted and outstanding	6,584,475	5,771,251
Restricted stock units granted and outstanding	98,750	98,750
Shares available for issuance under the 2020 equity incentive plan	602,544	1,332,221
Shares available for issuance under the Pledge 1% commitment	370,865	370,865
Total common stock reserved for future issuance	34,676,188	34,592,641

In 2019, the Company issued 280,000 shares of restricted common stock at a price of \$0.01 per share to certain founders of the Company ("Founders Stock"). The Company maintains a repurchase right whereby the Founders Stock are released from such repurchase right over a period of time of continued service by the recipient. Any shares subject to repurchase by the Company are not deemed, for accounting purposes, to be outstanding until those shares vest. Unvested outstanding Founders Stock as of December 31, 2022 and 2023, was 40,000 and 0 shares, respectively.

Stock Options

In June 2020, the Company adopted the 2020 Equity Incentive Plan (the "Plan"). The Plan provides for the grant of incentive stock options ("ISO"), non-statutory stock options ("NSO"), stock appreciation rights, restricted stock awards, restricted stock unit awards, and other stock awards.

The Plan was amended in December 2020, January 2021, July 2021, and August 2022 to increase the total number of shares reserved under the Plan to 7,889,537.

Options granted under the Plan are exercisable at various dates as determined upon grant and will expire no more than 10 years from their date of grant. The exercise price of each option shall be determined by the Board of Directors based on the estimated fair value of the Company's stock on the date of the option grant. The exercise price shall not be less than 100% of the fair market value of the Company's common stock at the time the option is granted. Most option grants generally vest 25% on the first anniversary of the original vesting commencement date, with the balance vesting monthly over the remaining three years and early exercise is permitted. The vesting period generally occurs over four years unless there is a specific performance vesting trigger at which time those shares will vest when the performance trigger is probable to occur.

On April 6, 2023, the Company's board of directors approved a stock option repricing (the "Option Repricing") in which the exercise price of certain outstanding options to purchase shares of the Company's common stock under the 2020 Equity Incentive Plan was reduced to \$1.14 per share, the estimated fair value of the Company's common stock as of December 31, 2022. The Option Repricing was intended to motivate holders of options with exercise prices in excess of the estimated fair value of the Company's common stock to remain with the Company and work toward its success. The Option Repricing included options granted pursuant to the 2020 Equity Incentive Plan that were held by, among others, members of the Company's board of the directors and the Company's named executive officers.

As a result of the Option Repricing, 5,215,705 shares of vested and unvested stock options outstanding as of April 6, 2023, with original exercise prices ranging from \$1.17 to \$11.79 per share, were repriced to an exercise price of \$1.14 per share. The total incremental fair value recognized as a result of the repricing was approximately \$1.5 million. The incremental fair value attributable to the vested option shares, totaling approximately \$0.8 million, was recognized as stock-based compensation expense during the twelve months ended December 31, 2023. The remaining incremental fair value attributable to the unvested option shares will be recognized over the remaining requisite service periods, which range from the date of the Option Repricing through the end of 2027.

[Table of Contents](#)

A summary of the Company's stock option activity under the Plan is as follows:

	<u>TOTAL OPTIONS</u>	<u>WEIGHTED- AVERAGE EXERCISE PRICE PER SHARE</u>	<u>WEIGHTED- AVERAGE REMAINING CONTRACTUAL TERM (in years)</u>	<u>AGGREGATE INTRINSIC VALUE (in thousands)</u>
Outstanding at December 31, 2022	6,584,475	\$ 5.94	8.4	\$ 12,978
Granted	620,300	1.18	—	—
Exercised	(8,547)	1.17	—	—
Cancelled	(1,424,977)	1.17	—	—
Outstanding at December 31, 2023	<u>5,771,251</u>	<u>\$ 1.14</u>	<u>8.8</u>	<u>\$ 221</u>
Exercisable as of December 31, 2023	<u>3,227,787</u>	<u>1.14</u>	<u>9.0</u>	<u>\$ 120</u>

The weighted-average grant date fair value of options granted for the years ended December 31, 2022 and 2023, was \$6.21 and \$0.75 per share, respectively. The total intrinsic value of options exercised during the year ended December 31, 2022, was \$2.8 million. The total intrinsic value of options exercised during the year ended December 31, 2023, was de minimis.

Liability for Early Exercise of Restricted Stock Options

Certain individuals were granted the ability to early exercise their stock options. The shares of common stock issued from the early exercise of unvested stock options are restricted and continue to vest in accordance with the original vesting schedule. The Company has the option to repurchase any unvested shares at the original purchase price upon any voluntary or involuntary termination. The shares purchased by the employees and non-employees pursuant to the early exercise of stock options are not deemed, for accounting purposes, to be outstanding until those shares vest. The cash received in exchange for exercised and unvested shares related to stock options granted is recorded as a liability for the early exercise of stock options in the balance sheets and will be transferred into common stock and additional paid-in capital as the shares vest. As of December 31, 2022 and 2023, 35,000 and 0, respectively, unvested shares issued under early exercise provisions were subject to repurchase by the Company. As of December 31, 2022 and 2023, the Company recorded \$0.1 million and \$0, respectively, associated with shares issued with repurchase rights in other long-term liabilities.

Restricted Stock Unit Awards

Restricted stock unit awards ("RSUs") granted under the Plan are subject to time-based vesting and convert to shares of common stock in accordance with the vesting schedule. RSUs are valued at the estimated fair value of the Company's stock on the date of grant and are amortized over the requisite service period. The total number of RSUs granted represents the maximum number of RSUs eligible to vest based upon the service conditions set forth in the grant agreements. Employees forfeit unvested RSUs upon termination of employment with a corresponding reversal of expense.

For the year ended December 31, 2022 and 2023, the Company granted 8,977 and no RSUs, respectively. For the year ended December 31, 2022, the weighted-average grant date fair value of the RSU's granted was \$11.79 per share and amended the vesting terms for all outstanding RSUs to include a Liquidity Event Requirement, as defined in the grant agreement, in addition to time and service-based vesting. The RSUs must meet the time and service-based requirement prior to the Liquidity Event Deadline, as defined in the grant agreement, in order to vest. As of December 31, 2023, 98,750 total RSUs were outstanding.

For the years ended December 31, 2022 and 2023, the Company recognized \$0.3 million and \$0.6 million of general and administrative stock-based compensation expense, respectively.

[Table of Contents](#)**Stock-Based Compensation Expense**

The following table summarizes stock-based compensation expense by financial statement line item in the Company's statement of operations and comprehensive loss (in thousands):

	YEAR ENDED DECEMBER 31,	
	2022	2023
Research and development	\$2,917	\$3,639
General and administrative	3,657	3,414
Total	\$6,584	\$7,053

In 2023, the Company entered into separation agreements with certain executives, terminating their employment and entered into consulting agreements. Under the separation agreements, service-based requirements for one of the executives were deemed satisfied for all RSUs as of the date of separation. In order for RSUs to vest, there must be a Liquidity event and the RSUs must meet the time and service-based requirement prior to the defined Liquidity Event Deadline. Total incremental compensation cost resulting from the modification of the RSUs for the year ended December 31, 2023, was \$0.5 million in general and administrative expense. The separation agreements also provided for extended vesting terms of certain options grants through the term of the consulting agreements. Total incremental compensation cost resulting from the modification of the extended vesting terms of certain options grants for the year ended December 31, 2023, was \$0.2 million in research and development expense.

The assumptions used in the Black-Scholes option pricing model to determine the fair value of the employee and nonemployee stock option grants issued for the year ended December 31, 2022 and 2023, were as follows:

	YEAR ENDED DECEMBER 31,	
	2022	2023
Stock price	\$6.55 - \$11.79	\$1.14
Risk-free rate of interest	1.7% - 4.2%	3.6% - 4.4%
Expected term (years)	5.7 - 6.7	5.5 - 6.1
Expected stock price volatility	81.3% - 86.8%	86.5% - 88.6%
Expected dividend yield	—	—

As of December 31, 2023, the unrecognized compensation cost related to outstanding employee and nonemployee options was \$8.6 million and is expected to be recognized as expense over a weighted-average period of approximately 1.9 years. As of December 31, 2023, there was no unrecognized compensation cost related to outstanding RSUs.

10. Income Taxes

The following is a reconciliation between the provision for income taxes and income taxes computed using the U.S. federal statutory corporate tax rate for the years ended December 31, 2022 and 2023 (in thousands):

	YEAR ENDED DECEMBER 31,	
	2022	2023
Expected tax benefit at statutory rate	\$ (12,334)	\$ (6,033)
State income tax, net of federal benefit	(3,449)	(1,024)
Permanent and other	(148)	(2,217)
Stock-based compensation expense	904	1,109
Research credits	(2,783)	(3,106)
Change in valuation allowance	17,863	11,343
Provision for income taxes	\$ 53	\$ 72

[Table of Contents](#)

The Company recorded \$0.1 million and \$0.1 million of current federal income tax expense within the provision for income taxes in the statements of operations and comprehensive loss for the years ended December 31, 2022 and December 31, 2023, respectively. The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities as of December 31, 2022 and 2023, were as follows (in thousands):

	YEAR ENDED DECEMBER 31,	
	2022	2023
Net operating loss carryforwards	\$ 12,377	\$ 20,424
Capitalized research and development	7,747	16,407
Deferred revenue	6,158	—
Operating lease liabilities	4,515	4,733
Intangible assets	4,005	1,042
Research and development credits	2,574	5,652
Other, net	1,463	2,121
Total deferred tax assets	\$ 38,839	\$ 50,379
Valuation allowance	(32,770)	(44,112)
Deferred tax assets, net of valuation allowance	\$ 6,069	\$ 6,267
Deferred tax liabilities:		
Fixed assets	(1,605)	(1,636)
Operating lease assets	(4,464)	(4,631)
Total deferred tax liabilities	\$ (6,069)	\$ (6,267)
Net deferred tax assets / (liabilities)	\$ —	\$ —

The Company has established a valuation allowance against its net deferred tax assets due to the uncertainty surrounding the realization of such assets. The Company periodically evaluates the recoverability of the deferred tax assets. At such time as it is determined that it is more likely than not that deferred assets are realizable, the valuation allowance will be reduced. The change in the valuation allowance for the year ended December 31, 2023, was an increase of \$11.3 million. The Company does not believe it is more likely than not that certain deferred tax assets will be realized primarily due to the generation of pre-tax book losses, no ability to carryback losses, the lack of feasible tax-planning strategies, the limited existing taxable temporary differences, and the subjective nature of forecasting future taxable income into the future.

As of December 31, 2022 and 2023, the Company had federal net operating loss carryforwards of approximately \$48.8 million and \$73.0 million, respectively, and state net operating loss carryforwards of \$49.1 million and \$91.2 million, respectively. All of the Company's federal net operating loss carryforwards as of December 31, 2022 and 2023, can be carried forward indefinitely. State net operating loss carryforwards begin to expire in 2039. As a result of the Tax Cuts and Jobs Act of 2017, for U.S. income tax purposes, net operating losses generated prior to 2018 can be carried forward for up to 20 years, while net operating losses generated after December 31, 2017 can be carried forward indefinitely, but are limited to 80% utilization against future taxable income each year.

At December 31, 2022 and 2023, the Company had federal research and development tax credit carryforwards of approximately \$2.1 million and \$4.8 million, respectively, and California research and development tax credit carryforwards of approximately \$2.1 million and \$3.8 million, respectively. Federal research and development tax credits will begin to expire in 2041. The California research and development tax credits are available indefinitely.

Pursuant to the Internal Revenue Code ("IRC") Sections 382 and 383, annual use of the Company's NOL and research and development credit carryforwards may be limited in the event a cumulative change in ownership of more than 50 percentage points (by value) within a three-year period. The Company has not completed an ownership

[Table of Contents](#)

change analysis pursuant to IRC Section 382. If ownership changes have occurred or occurs in the future, the amount of remaining tax attribute carryforwards available to offset taxable income and income tax expense in future years may be restricted or eliminated. If eliminated, the related asset would be removed from deferred tax assets with a corresponding reduction in the valuation allowance.

Uncertain tax positions are evaluated based upon the facts and circumstances that exist at each reporting period. Subsequent changes in judgement based upon new information may lead to changes in recognition, derecognition, and measurement. Adjustment may result, for example, upon resolution of an issue with the taxing authorities or expiration of a statute of limitations barring an assessment for an issue.

The Company recognizes a tax benefit from an uncertain tax position when it is more likely than not that the position will be sustained upon examination by tax authorities.

The following table summarizes the changes to the Company's gross unrecognized tax benefits for the years ended December 31, 2022 and 2023, respectively (in thousands):

	YEAR ENDED DECEMBER 31,	
	2022	2023
Unrecognized Tax Benefits – Beginning	\$ 1,675	\$ 2,853
Increases related to current year positions	783	1,040
Increases related to prior year positions	395	106
Unrecognized Tax Benefits – Ending	<u>\$ 2,853</u>	<u>\$ 3,999</u>

Due to the existence of the valuation allowance, future recognition of previously unrecognized tax benefits will not impact the Company's effective tax rate. The Company is subject to taxation in the United States and California. All of the Company's tax years from inception are subject to examination by federal and state tax authorities. The Company is not currently under examination by any federal, state or local tax authority.

The Inflation Reduction Act of 2022 which incorporates a Corporate Alternative Minimum Tax ("CAMT") was signed on August 16, 2022. The changes affect the tax years beginning after December 31, 2022. The new tax requires companies to compute two separate calculations for federal income tax purposes and pay the greater of the new minimum tax or their regular tax liability. As of December 31, 2023, this did not have a material impact on the Company's financial statements.

11. Related Party Transactions

GC Cell and GC Corp, subsidiaries of Green Cross Corp, are stockholders of the Company and are represented on the Company's board of directors.

In November 2019, October 2020, March 2021, and December 2022, the Company entered into a license agreement (collectively, the "License Agreements") with GC Cell (see Note 8). In August 2020, the Company entered into a Research and Service Agreement with GC Cell in which GC Cell is to provide mutually agreed research services in support of the research and development of one or more of the Selected Products that the Company has licensed from GC Cell under the License Agreements. For the year ended December 31, 2022, the Company incurred \$3.4 million in research and development expense in connection with the GC Cell License Agreements and Research and Service Agreement. The Company did not incur any research and development expense in connection with the agreements for the year ended December 31, 2023. As of December 31, 2022 and 2023, the Company had \$1.0 million and \$0, respectively, of accounts payable and accrued expenses in connection with the GC Cell License Agreements and Research Service Agreement.

In September 2023, the Company and GC Cell amended the AB-201 Agreement (see Note 8). For the year ended December 31, 2023, the Company recognized \$0.6 million of license and development support-related revenue on its statements of operations and comprehensive loss, related to GC Cell's achievement of a defined development milestone and development support activities under the Amended AB-201 Agreement. As of December 31, 2023, total accounts receivable related to the Amended AB-201 Agreement was \$0.6 million.

[Table of Contents](#)

Under the AB-205 Agreement, GC Cell agreed to reimburse the Company for Direct Costs incurred on behalf of GC Cell in accordance with the Development Plan under the AB-205 Agreement, provided that such reimbursed costs are deemed to form part of the Direct Costs incurred and paid by GC Cell (see Note 8). Total reimbursements for development costs invoiced to GC Cell in connection with the AB-205 Agreement for the years ended December 31, 2022 and 2023, were \$0 and \$1.6 million, respectively. During the year ended December 31, 2023, the Company received payments totaling \$1.0 million from GC Cell and had \$0.6 million recorded in the balance sheets as other receivable as of December 31, 2023.

In March 2020, the Company entered into the Manufacturing Agreement with GC Cell, where GC Cell is to perform manufacturing services with respect to any biological or chemical product manufactured or to be manufactured for use in Phase 1 or Phase 2 clinical trials. The Company amended the Manufacturing Agreement in June 2020 to include the Company's right to terminate the agreement at will. For the years ended December 31, 2022 and 2023, the Company incurred \$3.3 million and \$3.7 million, respectively, in research and development expenses in connection with the agreement. As of December 31, 2022 and 2023, the Company had \$1.6 million and \$2.4 million, respectively, of accounts payable and accrued expenses in connection with the Manufacturing Agreement.

In January 2021, concurrent with entering into the Merck Collaboration Agreement, the Company also entered into a Partnered Program License Agreement with GC Cell to obtain exclusive, worldwide rights to GC Cell's CAR-NK technology with respect to the licensed products and to engage GC Cell to perform services in support of the research programs. The Company agreed to reimburse GC Cell for research and development services as these services were provided. The Company was required to pay GC Cell 100% of regulatory milestones, sales milestones and royalty payments received by Merck relating to products in Asia, Australia and New Zealand and 50% of upfront payments, license fees, regulatory milestones, sales milestones and royalty payments received by Merck relating to products in all other territories. In October 2023, the Merck Collaboration Agreement and development thereunder was terminated by Merck.

For the years ended December 31, 2022 and 2023, the Company incurred \$1.4 million and \$0.1 million, respectively, related to research and development services in connection with the Partnered Program License Agreement. As of December 31, 2022 and 2023, the Company had approximately \$0.7 million and \$0, respectively, of accounts payable and accrued expenses in connection with the Partnered Program License Agreement.

12. Commitments and Contingencies

Operating Leases

The Company has multiple facility leases in San Diego, California, for office and laboratory space, including a cGMP manufacturing center, under non-cancellable operating leases with various expiration dates through 2029.

The Company leases certain office space in San Diego, California, under a non-cancelable operating lease, with a term through December 2025 (the "Executive Drive Lease"). The lease agreement for 13,405 square feet commenced on December 23, 2019, with a six-year initial term and includes aggregate monthly payments to the lessor of \$2.8 million. The Executive Drive Lease also provides for rent abatements and scheduled increases in base rent. In connection with the lease, the Company made a one-time cash security deposit in the amount of \$0.4 million, of which \$0.2 million was refunded in October 2021, and the remaining \$0.2 million is refundable at the end of the lease term and is included in other long-term assets in the Company's balance sheets. The Executive Drive Lease includes a renewal option, which includes an option to renew for five additional years. The Company will not exercise the option and, as such, is not reflected as part of the ROU asset and associated lease liabilities.

In June 2021, the Company entered into a lease agreement for 51,621 square feet of office and laboratory space, and a cGMP manufacturing center in San Diego, California (the "Morehouse Lease"), which represented a portion of a new facility that was under construction. The construction and design of the asset was the primary responsibility of the lessor. The Company was involved in certain aspects of construction and design for certain interior features and leasehold improvements that will be beneficial to the Company to better suit its business needs and intended purpose of the space. The Morehouse Lease is accounted for as an operating lease and commenced in the second quarter of 2022 (office and laboratory space) and in the third quarter 2022 (cGMP manufacturing center). The

[Table of Contents](#)

Morehouse Lease has an initial term of 88 months and includes aggregate monthly payments to the lessor of approximately \$23.2 million with a rent escalation clause, and a tenant improvement allowance of approximately \$12.3 million. The lease agreement required the Company to provide an unconditional and irrevocable letter of credit in the amount of \$0.2 million, which is recorded as restricted cash on the Company's balance sheets as of December 31, 2022 and 2023.

In August 2022, the Company entered into a lease agreement to use designated laboratory and vivarium space in San Diego, California (the "Explora Lease"). The Explora Lease is accounted for as an operating lease and commenced in August 2022. The Explora Lease has an initial term of 36 months and includes aggregate monthly payments to the lessor of approximately \$0.8 million with a rent escalation clause.

The following table presents operating rent expense and related short-term lease costs (in thousands):

	YEAR ENDED DECEMBER 31,	
	2022	2023
Rent expense	\$ 2,797	\$ 4,113
Amount of rent expense related to short-term leases	302	286

Future minimum annual obligations under the Company's operating leases with terms in excess of one year are as follows (in thousands):

Year Ended December 31,	
2024	4,036
2025	4,012
2026	3,418
2027	3,520
Thereafter	5,916
Total minimum lease payments	20,902
Less: amount representing interest	(3,990)
Present value of operating lease liabilities	16,912
Less: operating lease liabilities, current	(3,596)
Operating lease liabilities	<u>\$ 13,316</u>

As the Company's leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at the lease commencement date. The Company's weighted-average remaining term, and weighted-average discount rate were as follows:

	AS OF DECEMBER 31,	
	2022	2023
Weighted-average remaining lease term	6.3 years	5.3 years
Weighted-average discount rate	7.8%	7.8%

On July 22, 2022, the Company entered into a sublease (the "Sublease Agreement") with Origis Operating Services, LLC, (the "Sublessee"), whereby the Company agreed to sublease to Sublessee all of the 13,405 rentable square feet of office space in San Diego, CA currently leased by the Company under the Executive Drive Lease. The sublease commenced on August 1, 2022, and has a term through December 31, 2025. The aggregate base rent is approximately \$2.6 million commencing August 1, 2022. The Company records sublease income as a reduction of general and administrative expense. Upon execution of the Sublease Agreement, the Company received a cash security deposit of \$0.1 million from the Sublessee which is recorded as other non-current liabilities in the balance sheets.

[Table of Contents](#)

The expected undiscounted cash flows to be received from the sublease are as follows (in thousands):

Year Ended December 31,	
2024	\$ 847
2025	873
Total	<u>\$1,720</u>

The Company recognized sublease income of \$0.4 million and \$0.8 million for the years ended December 31, 2022 and 2023, respectively.

13. Subsequent Events

For the purposes of the financial statements as of December 31, 2023, and the year then ended, the Company has evaluated the subsequent events through May 3, 2024, the date the audited financial statements were issued.

During the period from January 1 through May 3, 2024, the Company granted stock options under the Plan to purchase an aggregate of 2,304,679 shares of its common stock at a weighted-average exercise price of \$2.35 per share. On April 29, 2024, the Board approved an amendment to the Company's Amended and Restated Certificate of Incorporation. The amendment increased the number of authorized shares of common stock to 40,248,588 and increased the number of common stock reserved for issuance under the 2020 Equity Incentive Plan to 9,139,537.

ARTIVA BIOTHERAPEUTICS, INC.
Condensed Balance Sheets
(Unaudited)
(in thousands, except share and par value data)

	AS OF	
	DECEMBER 31, 2023	MARCH 31, 2024
Assets		
Current assets:		
Cash and cash equivalents	\$ 53,504	\$ 48,200
Short-term investments	23,467	13,934
Accounts receivable (including related party amounts of \$569 and \$819, respectively)	1,034	819
Other receivables (including related party amounts of \$607 and \$686, respectively)	724	904
Prepaid expenses and other current assets	1,092	2,029
Total current assets	79,821	65,886
Restricted cash	258	258
Property and equipment, net	8,096	7,522
Operating lease right-of-use assets	16,547	15,848
Deferred offering costs	—	286
Other long-term assets	392	361
Total assets	<u>\$ 105,114</u>	<u>\$ 90,161</u>
Liabilities, convertible preferred stock, and stockholders' deficit		
Current liabilities:		
Accounts payable (including related party amounts of \$199 and \$971, respectively)	\$ 614	\$ 1,483
Accrued expenses (including related party amounts of \$2,161 and \$265, respectively)	8,017	5,238
Current portion of lease liabilities	3,596	3,647
Total current liabilities	12,227	10,368
Lease liabilities, net of current portion	13,316	12,611
Simple agreements for future equity ("SAFEs") (including related party amounts of \$20,315 and \$20,532, respectively)	25,100	25,368
Other non-current liabilities	73	74
Total liabilities	50,716	48,421
Commitments and contingencies (Note 11)		
Series A convertible preferred stock, \$0.0001 par value; 16,110,463 shares authorized, issued, and outstanding at December 31, 2023 and March 31, 2024; \$80,552 aggregate liquidation preference at December 31, 2023 and March 31, 2024	96,767	96,767
Series B convertible preferred stock, \$0.0001 par value; 10,909,091 shares authorized, issued, and outstanding at December 31, 2023 and March 31, 2024; \$120,000 aggregate liquidation preference at December 31, 2023 and March 31, 2024	119,646	119,646
Stockholders' deficit:		
Common stock, \$0.0001 par value; 38,998,588 shares authorized at December 31, 2023 and March 31, 2024; 3,551,690 shares issued and outstanding at December 31, 2023 and March 31, 2024	—	—
Additional paid-in capital	18,988	20,394
Accumulated other comprehensive income	308	207
Accumulated deficit	(181,311)	(195,274)
Total stockholders' deficit	(162,015)	(174,673)
Total liabilities, convertible preferred stock and stockholders' deficit	<u>\$ 105,114</u>	<u>\$ 90,161</u>

See accompanying notes to condensed financial statements

ARTIVA BIOTHERAPEUTICS, INC.
Condensed Statements of Operations and Comprehensive Loss
(Unaudited)
(in thousands, except share and per share data)

	THREE MONTHS ENDED MARCH 31,	
	2023	2024
Revenue:		
Collaboration revenue	\$ 989	\$ —
License and development support revenue (including related party amounts of \$0 and \$251, respectively)	—	251
Total revenue	989	251
Operating expenses:		
Research and development (including related party amounts of \$916 and \$288, respectively)	14,771	11,156
General and administrative	3,906	3,587
Total operating expenses	18,677	14,743
Loss from operations	(17,688)	(14,492)
Other income:		
Interest income	1,024	650
Change in fair value of SAFEs (including related party amounts of \$0 and \$(217), respectively)	—	(268)
Other income (expense), net	(53)	147
Total other income, net	971	529
Net loss	\$ (16,717)	\$ (13,963)
Net loss per share, basic and diluted	\$ (4.80)	\$ (3.93)
Weighted-average common shares outstanding, basic and diluted	3,482,032	3,551,690
Comprehensive loss:		
Net loss	\$ (16,717)	\$ (13,963)
Other comprehensive loss:		
Unrealized loss on short-term investments	—	(101)
Comprehensive loss	\$ (16,717)	\$ (14,064)

See accompanying notes to condensed financial statements

ARTIVA BIOTHERAPEUTICS, INC.
**Condensed Statements of Convertible Preferred Stock and Stockholders' Deficit
(Unaudited)**

(in thousands, except share data)

	SERIES A CONVERTIBLE PREFERRED STOCK		SERIES B CONVERTIBLE PREFERRED STOCK		COMMON STOCK		ADDITIONAL PAID-IN CAPITAL	ACCUMULATED OTHER COMPREHENSIVE INCOME	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' DEFICIT
	SHARES	AMOUNT	SHARES	AMOUNT	SHARES	AMOUNT				
Balance at December 31, 2022	16,110,463	\$96,767	10,909,091	\$119,646	3,478,143	\$ —	\$ 11,895	\$ —	\$ (152,591)	\$ (140,696)
Vesting of shares of common stock subject to repurchase, including early exercise	—	—	—	—	6,250	—	7	—	—	7
Stock-based compensation expense	—	—	—	—	—	—	1,832	—	—	1,832
Net loss	—	—	—	—	—	—	—	—	(16,717)	(16,717)
Balance at March 31, 2023	16,110,463	\$96,767	10,909,091	\$119,646	3,484,393	\$ —	\$ 13,734	\$ —	\$ (169,308)	\$ (155,574)
Balance at December 31, 2023	16,110,463	\$96,767	10,909,091	\$119,646	3,551,690	\$ —	\$ 18,988	\$ 308	\$ (181,311)	\$ (162,015)
Stock-based compensation expense	—	—	—	—	—	—	1,406	—	—	1,406
Unrealized loss on short-term investments	—	—	—	—	—	—	—	(101)	—	(101)
Net loss	—	—	—	—	—	—	—	—	(13,963)	(13,963)
Balance at March 31, 2024	16,110,463	\$96,767	10,909,091	\$119,646	3,551,690	\$ —	\$ 20,394	\$ 207	\$ (195,274)	\$ (174,673)

See accompanying notes to condensed financial statements

ARTIVA BIOTHERAPEUTICS, INC.
Condensed Statements of Cash Flows
(Unaudited)
(in thousands)

	THREE MONTHS ENDED MARCH 31,	
	2023	2024
Operating activities:		
Net loss	\$ (16,717)	\$(13,963)
Adjustments to reconcile net loss to cash used in operating activities:		
Depreciation and amortization	578	587
Stock-based compensation	1,832	1,406
Change in fair value of SAFEs (including related party amounts of \$0 and \$217, respectively)	—	268
Accretion of discounts on short-term investments	—	(368)
Changes in operating assets and liabilities:		
Accounts receivable (including related party amounts of \$0 and \$(251), respectively)	(548)	215
Other receivables (including related party amounts of \$0 and \$(79), respectively)	(274)	(180)
Prepaid expenses and other current assets	(239)	(936)
Other long-term assets	33	31
Accounts payable (including related party amounts of \$125 and \$772, respectively)	520	851
Accrued expenses (including related party amounts of \$(1,026) and \$(1,896), respectively)	184	(3,042)
Operating lease right-of-use assets and lease liabilities	316	45
Deferred revenue	72	—
Net cash used in operating activities	<u>(14,243)</u>	<u>(15,086)</u>
Investing activities:		
Purchases of property and equipment	(1,862)	(18)
Purchases of short-term investments	—	(6,200)
Maturities of short-term investments	—	16,000
Net cash provided by (used in) investing activities	<u>(1,862)</u>	<u>9,782</u>
Financing activities:		
Cash paid for repurchase of unvested shares	(12)	—
Net cash used in financing activities	<u>(12)</u>	<u>—</u>
Net decrease in cash, cash equivalents and restricted cash	(16,117)	(5,304)
Cash, cash equivalents and restricted cash at beginning of period	102,777	53,762
Cash, cash equivalents and restricted cash at end of period	<u>\$ 86,660</u>	<u>\$ 48,458</u>
Reconciliation of cash, cash equivalents and restricted cash to the balance sheet		
Cash and cash equivalents	\$ 86,415	\$ 48,200
Restricted cash	245	258
Total cash, cash equivalents and restricted cash	<u>\$ 86,660</u>	<u>\$ 48,458</u>
Supplemental disclosures of noncash activities:		
Property and equipment purchases in accounts payable and accrued expenses	\$ 531	\$ 13
Deferred offering costs in accounts payable and accrued expenses	<u>\$ —</u>	<u>\$ 286</u>

See accompanying notes to condensed financial statements

NOTES TO CONDENSED FINANCIAL STATEMENTS (Unaudited)

1. Organization, Going Concern, and Basis of Presentation

Organization

Artiva Biotherapeutics, Inc. (the “Company”) was incorporated in the State of Delaware on February 14, 2019. The Company is a biopharmaceutical company focused on developing off-the shelf, allogeneic, natural killer (“NK”) cell-based therapies that are effective, safe and accessible for patients with devastating autoimmune diseases and cancers.

From its inception to March 31, 2024, the Company has devoted substantially all of its resources to organizing and staffing the Company, business planning, raising capital, establishing and engaging in collaborations, performing research and development, advancing and scaling up product candidate manufacturing, establishing cold chain delivery logistics, establishing and protecting its intellectual property portfolio, and providing general and administrative support for these activities. The Company’s operations to date have been funded primarily through the issuance and sale of convertible promissory notes, convertible preferred stock and simple agreements for future equity (the “SAFEs”).

Going Concern

The condensed financial statements have been prepared on a going concern basis, which contemplates the realization of assets and settlement of liabilities in the normal course of business, and do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or amounts and classification of liabilities that may result from the outcome of this uncertainty.

The Company has incurred net losses and negative cash flows from operations since inception, has a significant accumulated deficit and expects to continue to incur net losses for the foreseeable future. The Company has never generated any revenue from product sales and does not expect to generate any revenues from product sales unless and until it successfully completes development of and obtains regulatory approval for its product candidates, which will not be for several years, if ever. The Company has an accumulated deficit of \$195.3 million as of March 31, 2024. During the three months ended March 31, 2024, the Company used \$15.1 million of cash for operating activities. As of March 31, 2024, the Company has \$48.2 million in cash and cash equivalents and \$13.9 million in short-term investments.

Management estimates that based on the Company’s liquidity resources, there is substantial doubt about the Company’s ability to continue as a going concern within 12 months from the date of issuance of the condensed financial statements.

As the Company continues to pursue its business plan, it expects to finance its operations through a combination of public or private equity or debt financings or other capital sources, which may include strategic collaborations and other strategic arrangements with third parties. However, there can be no assurance that any additional financing or strategic transactions will be available to the Company on acceptable terms, if at all. Additionally, if the Company issues equity securities to raise additional funds, its existing stockholders may experience dilution, and the new equity securities may have rights, preferences and privileges senior to those of the Company’s existing shareholders.

Basis of Presentation

The accompanying unaudited condensed financial statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) and pursuant to rules and regulations of the Securities Exchange Commission for interim financial information. Accordingly, they do not include all of the information and notes required by GAAP for complete financial statements. These unaudited condensed financial statements include only normal and recurring adjustments that the Company believes are necessary to fairly state the Company’s financial position and the results of its operations and cash flows. The results for the three months ended March 31, 2024 are not necessarily indicative of the results expected for the full fiscal year or any subsequent interim period. The unaudited condensed balance sheet as of December 31, 2023 has been derived from the audited financial

[Table of Contents](#)

statements as of that date but does not include all disclosures required by GAAP for complete financial statements. As all of the disclosures required by GAAP for complete financial statements are not included herein, these unaudited condensed financial statements and the notes accompanying herein should be read in conjunction with the Company's audited financial statements as of and for the years ended December 31, 2022 and 2023. Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Updates ("ASU") promulgated by the Financial Accounting Standards Board ("FASB").

2. Summary of Significant Accounting Policies

The Company's significant accounting policies are disclosed in the audited financial statements as of and for the years ended December 31, 2022 and 2023, included elsewhere in this prospectus. Since the date of those financial statements, there have been no changes to its significant accounting policies, except where noted below.

Use of Estimates

The preparation of condensed financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the condensed financial statements and the reported amounts of expenses during the reporting period. Accounting estimates and management judgments reflected in the condensed financial statements include: revenue recognized, the accrual of research and development expenses, common stock, stock-based compensation, SAFEs and operating lease liabilities. Although these estimates are based on the Company's knowledge of current events and actions it may undertake in the future, actual results may materially differ from these estimates and assumptions.

Short-Term Investments

Short-term investments consist of debt securities, classified as available-for-sale securities and have original maturities of greater than three months. The Company has classified all available-for-sale securities as current assets in the condensed balance sheets because these are considered highly liquid securities and are available for use in current operations. The Company carries these securities at fair value and reports unrealized gains and losses as a separate component of accumulated other comprehensive income. The cost of debt securities is adjusted for amortization of purchase premiums and accretion of discounts to maturity. Such amortization and accretion are included in other income in the condensed statements of operations and comprehensive loss. Realized gains and losses on sales of securities are determined using the specific identification method and recorded in other income in the condensed statements of operations and comprehensive loss.

As of December 31, 2023, and March 31, 2024, accrued interest receivables on short-term investments were \$0.1 and \$0.1 million, respectively, and are included in prepaid expenses and other current assets in the condensed balance sheets. The Company does not measure an allowance for credit losses for accrued interest receivables. For the purposes of identifying and measuring an impairment, accrued interest is excluded from both the fair value and amortized cost basis of the short-term investment. Uncollectible accrued interest receivables associated with an impaired debt security are reversed against interest income upon identification of the impairment. No accrued interest receivables were written off during the three months ended March 31, 2023 and 2024.

Restricted Cash

Restricted cash is comprised of cash that is restricted as to withdrawal or use under the terms of certain contractual agreements. Restricted cash as of December 31, 2023 and March 31, 2024, was \$0.3 million and \$0.3 million, respectively, and consisted of collateral for letters of credit related to the Company's lease agreements and is included in non-current assets in the condensed balance sheets (see Note 11).

Deferred Offering Costs

Deferred offering costs, consisting of legal, accounting and other fees and costs relating to the Company's initial public offering, are capitalized and recorded in the condensed balance sheets. As of December 31, 2023 and March 31, 2024, deferred offering costs of \$0 million and \$0.3 million, respectively, were recorded in the condensed balance sheets.

[Table of Contents](#)

Net Loss Per Share

Basic net loss per share is calculated by dividing the net loss by the weighted-average number of common stock outstanding for the period. Diluted net loss per share is computed by dividing the net loss by the weighted-average number of shares of common stock and common stock equivalents outstanding for the period. Common stock equivalents are only included when their effect is dilutive. The Company's potentially dilutive securities include shares of its convertible preferred stock, as well as outstanding stock options and restricted stock units under the Company's equity incentive plan and have been excluded from the computation of diluted net loss per share as they would be anti-dilutive to the net loss per share. For all periods presented, there is no difference in the number of shares used to calculate basic and diluted shares outstanding due to the Company's net loss position.

The following table sets forth the outstanding potentially dilutive securities that have been excluded in the calculation of diluted net loss per share because their inclusion would be anti-dilutive:

	AS OF MARCH 31,	
	2023	2024
Convertible preferred stock	27,019,554	27,019,554
Unvested common stock upon early exercise of stock options	18,750	—
Unvested restricted common stock subject to repurchase	40,000	—
Unvested restricted stock units	98,750	98,750
Options to purchase common stock	6,246,412	6,568,326
SAFEs (1)	—	—
Total	33,423,466	33,686,630

- (1) The contingently convertible SAFEs were not included for purposes of calculating the number of diluted shares outstanding as of March 31, 2024, as the number of dilutive shares is based on a conversion ratio associated with the pricing of a future financing or liquidation event. Therefore, the contingently convertible SAFEs' conversion ratio, and the resulting number of dilutive shares, is not determinable until the contingency is resolved. If the contingency were to have been resolved as of March 31, 2024, the number of anti-dilutive shares that would have been excluded in the calculation of dilutive net loss per share, when applying the respective conversion ratio, is estimated as 9.3 million as of March 31, 2024.

Recently Adopted Accounting Standards

In August 2020, the FASB issued ASU No. 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20) and Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity* ("ASU 2020-06"). ASU 2020-06 was issued to reduce the complexity associated with accounting for certain financial instruments with characteristics of liabilities and equity. ASU 2020-06 reduces the number of accounting models for convertible debt instruments and redeemable convertible preferred stock and improves the disclosures for convertible instruments and related earnings per share guidance. ASU 2020-06 also amends the guidance for the derivatives scope exception for contracts in an entity's own equity and improves and amends the related earnings per share guidance. For public entities that qualify as a filer with the Securities and Exchange Commission, excluding entities eligible to be smaller reporting companies, ASU 2020-06 is effective for fiscal annual periods beginning after December 15, 2021, including interim periods within those fiscal years. For nonpublic entities, ASU 2020-06 is effective for fiscal years beginning after December 15, 2023, including interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, including interim periods within those fiscal years. ASU 2020-06 must be adopted as of the beginning of a Company's annual fiscal year. The Company adopted this standard on January 1, 2024, and the adoption of the standard did not have a material impact on its financial statements.

3. Fair Value Measurements

The following table presents information about the Company's financial assets and liabilities that are measured at fair value on a recurring basis and indicates their respective levels within the fair value hierarchy (in thousands):

		AS OF DECEMBER 31, 2023			
	CLASSIFICATION	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets					
Money market funds	Cash and cash equivalents	\$28,517	\$28,517	\$ —	\$ —
Commercial paper	Short-term investments	2,090	—	2,090	—
Government and government agency bonds	Short-term investments	19,982	—	19,982	—
Corporate bonds	Short-term investments	1,395	—	1,395	—
Total assets		<u>\$51,984</u>	<u>\$28,517</u>	<u>\$23,467</u>	<u>\$ —</u>
Liabilities					
SAFEs	Liabilities	\$25,100	\$ —	\$ —	\$25,100
Total liabilities		<u>\$25,100</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$25,100</u>

		AS OF MARCH 31, 2024			
	CLASSIFICATION	TOTAL	LEVEL 1	LEVEL 2	LEVEL 3
Assets					
Money market funds	Cash and cash equivalents	\$28,699	\$28,699	\$ —	\$ —
Commercial paper	Short-term investments	1,486	—	1,486	—
Government and government agency bonds	Short-term investments	12,448	—	12,448	—
Total assets		<u>\$42,633</u>	<u>\$28,699</u>	<u>\$13,934</u>	<u>\$ —</u>
Liabilities					
SAFEs	Liabilities	<u>\$25,368</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$25,368</u>
Total liabilities		<u>\$25,368</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$25,368</u>

The carrying amounts of all cash and cash equivalents, accounts receivable, other receivable, prepaid and other current assets, accounts payable, and accrued expenses are considered to be representative of their respective fair values because of the short-term nature of those instruments.

Short-Term Investments

The Company's assets with a fair value categorized as Level 2 within the fair value hierarchy consist of commercial paper, government and government agency bonds, and corporate bonds. These assets have been initially valued at the transaction price and subsequently valued at the end of each reporting period utilizing third-party pricing services. The pricing services utilize industry standard valuation models whereby all significant inputs, including benchmark yields, reported trades, broker/dealer quotes, issuer spreads, bids, offers, or other market-related data, are observable.

Simple Agreements for Future Equity

The estimated fair value of the SAFEs (see Note 7) is determined based on the aggregated, probability-weighted average of the outcomes of certain scenarios, including: (i) equity financing, with conversion of the SAFEs into a number of shares of convertible preferred stock at the lower of the post-money valuation cap price of \$11.00 and the discount price (the lowest price of the standard convertible preferred stock sold in the equity financing multiplied by the specified discount rate of 85%); (ii) liquidity event (change of control, direct listing, or an initial public offering) with mandatory conversion to common stock at the lower of post-money valuation cap of \$11.00 and discount price

[Table of Contents](#)

(price of the common stock multiplied by the discount rate of 85%); and (iii) dissolution event, with SAFE holders automatically entitled to receive cash payments equal to the purchase amount, prior to and in preference to any distribution of any assets or surplus funds to the holders of convertible preferred and common stock. On May 29, 2024, the Company executed an amendment to the SAFEs (the "SAFE Amendment"). The SAFE Amendment amended the definition of liquidity event to exclude an initial public offering and amended the definition of the discount price under an initial public offering to the lower of (a) the price per share of common stock sold to the public by the underwriters in the initial public offering multiplied by the discount rate of 85% or (b) the post-money valuation cap price of \$11.00. The combined value of the probability-weighted average of those outcomes is then discounted back to each reporting period in which the SAFEs are outstanding, in each case based on a risk-adjusted discount rate estimated based on the implied interest rate using the changes in observed interest rates of corporate debt that the Company believes is appropriate for those probability-adjusted cash flows.

Fair value measurements associated with SAFEs were determined based on significant inputs not observable in the market, which represent Level 3 measurements within the fair value hierarchy. Increases and decreases in the fair value of the SAFEs can result from updates to assumptions such as expected timing and probability of a qualified financing event, or changes in discount rates, among other assumptions. Based on management's assessment of the valuation of the SAFEs, performed by the Company's third-party valuation specialists, none of the changes in the fair value of those instruments were due to changes in the Company's own credit risk for the reporting periods presented. Judgement is used in determining these assumptions as of the initial valuation date and at each subsequent reporting period. Changes or updates to assumptions could have a material impact on the reported fair value, and the change in fair value of SAFEs and the results of operations in any given period.

The following table summarizes the significant inputs not observable in the market upon which the fair value measurements associated with the SAFEs were determined:

	VALUATION TECHNIQUE	UNOBSERVABLE INPUT	AS OF DECEMBER 31, 2023
Liabilities			
SAFES	Scenario-based approach	Probability weighting	15.0% - 70.0%
		Discount rate	20.1%
		Remaining term to event (in years)	0.50 - 0.75

	VALUATION TECHNIQUE	UNOBSERVABLE INPUT	AS OF MARCH 31, 2024
Liabilities			
SAFES	Scenario-based approach	Probability weighting	15.0% - 45.0%
		Discount rate	21.5%
		Remaining term to event (in years)	0.29 - 0.75

The following table summarizes the changes in fair value associated with Level 3 financial instruments held during the periods presented (in thousands):

	SAFES
Balance at December 31, 2022	\$ —
Proceeds from issuance of SAFES	24,393
Changes in fair value of SAFES	707
Balance at December 31, 2023	25,100
Changes in fair value of SAFES	268
Balance at March 31, 2024	<u>\$25,368</u>

There were no transfers to or from Level 3 during any of the periods presented.

4. Cash, Cash Equivalents and Short-term Investments

It is the Company's policy to mitigate credit risk in its financial assets by maintaining a well-diversified portfolio that limits the amount of exposure as to maturity and investment type. All of the Company's available-for-sale investments had a maturity date of less than one year as of March 31, 2024.

The following table summarizes the Company's cash, cash equivalents and short-term investments for each of the periods presented (in thousands):

		AS OF DECEMBER 31, 2023			
	CLASSIFICATION	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR MARKET VALUE
Cash and money market funds	Cash and cash equivalents	\$ 53,504	\$ —	\$ —	\$53,504
Commercial paper	Short-term investments	2,048	42	—	2,090
Government and government agency bonds	Short-term investments	19,728	254	—	19,982
Corporate bonds	Short-term investments	1,383	12	—	1,395
Total cash, cash equivalents and short-term investments		<u>\$ 76,663</u>	<u>\$ 308</u>	<u>\$ —</u>	<u>\$76,971</u>

		AS OF MARCH 31, 2024			
	CLASSIFICATION	AMORTIZED COST	GROSS UNREALIZED GAINS	GROSS UNREALIZED LOSSES	FAIR MARKET VALUE
Cash and money market funds	Cash and cash equivalents	\$ 48,200	\$ —	\$ —	\$48,200
Commercial paper	Short-term investments	1,473	13	—	1,486
Government and government agency bonds	Short-term investments	12,254	194	—	12,448
Total cash, cash equivalents and short-term investments		<u>\$ 61,927</u>	<u>\$ 207</u>	<u>\$ —</u>	<u>\$62,134</u>

As of March 31, 2024, the Company did not have any short-term investments with gross unrealized losses. The Company does not intend to sell the investments and it is not more likely than not that the Company will be required to sell the investments before recovery of their amortized cost basis. As of March 31, 2024, no allowance for credit losses was recorded.

5. Property and Equipment, Net

Property and equipment, net consisted of the following (in thousands):

	AS OF	
	DECEMBER 31, 2023	MARCH 31, 2024
Lab equipment	\$ 9,760	\$ 9,782
Furniture and fixtures	871	871
Computers and software	607	598
Leasehold improvements	390	390
	11,628	11,641
Less accumulated depreciation	(3,532)	(4,119)
Total property and equipment, net	<u>\$ 8,096</u>	<u>\$ 7,522</u>

The Company recognized \$0.6 million and \$0.6 million in depreciation expense for the three months ended March 31, 2023 and 2024, respectively.

6. Accrued Expenses

Accrued expenses consist of the following (in thousands):

	AS OF	
	DECEMBER 31, 2023	MARCH 31, 2024
Accrued research and development expenses	\$ 2,861	\$ 754
Accrued payroll and other employee benefits	4,047	2,080
Other accrued expenses	1,109	2,404
Total accrued expenses	<u>\$ 8,017</u>	<u>\$ 5,238</u>

7. Simple Agreement for Future Equity

During 2023, the Company entered into SAFEs with various existing investors and related parties with aggregate gross proceeds of \$24.4 million. The SAFEs granted investors with rights to participate in a future equity financing. The SAFEs have no maturity dates and bear no interest. Upon an equity financing, the SAFEs will automatically convert into the type of stock issued in the financing at a per share conversion price equal to the greater of (i) the purchase amount of the SAFEs divided by the post-money valuation cap price of \$11.00 per share, or (ii) the purchase amount of the SAFEs divided by the 85% per share price paid by investors in the financing. Upon an initial public offering, the SAFEs will automatically convert into shares of common stock equal to the purchase amount of the SAFE divided by the discount price (the lower of (a) the price per share of common stock sold to the public by the underwriters in the initial public offering multiplied by the discount rate of 85% or (b) the post-money valuation cap price of \$11.00).

Other conversion events include liquidity events (a change of control or direct listing). Upon a liquidity event, each investor will automatically be entitled to receive a portion of proceeds equal to the greater of (i) the purchase amounts of the SAFEs, or (ii) the amount payable in the number of common shares equal to the purchase amount of the SAFEs divided by the 85% per share price. Upon a dissolution event and to the extent sufficient funds are available, the holders of SAFEs shall be entitled to receive cash payments equal to the purchase amount, prior to and in preference to any distribution of any assets or surplus funds to the holders of convertible preferred and common stock.

8. Collaboration, Option, and License Agreements

The Company has entered into several agreements with GC Cell and related entities concerning its NK cell therapy platform and manufacturing of its core products, as described below.

Option and License Agreement with GC Cell

In September 2019, the Company entered into an option and license agreement with GC Cell, formerly Green Cross Cell Corporation, as amended in June 2020 and February 2022 (the “Core Agreement”). Under the Core Agreement, GC Cell granted the Company an exclusive, royalty-bearing license, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell relating to non-genetically modified and genetically modified NK cells, and culturing, engineering, manufacturing thereof, to research, develop, manufacture, and commercialize NK cell pharmaceutical products in the Artiva Territory, which is anywhere in the world except for Asia, Australia, and New Zealand. GC Cell retained rights under the license to allow it and its affiliates to perform obligations under the Core Agreement and other agreements between the Company and them.

Under the Core Agreement, GC Cell agreed to conduct a discovery, research, preclinical development, and manufacturing program under a plan approved by a Joint Steering Committee (“the JSC”), to generate and identify product candidates for nomination as option candidates. GC Cell will bear all costs for its work under the R&D Plan, except that the Company will bear all costs for completing IND-enabling activities performed by GC Cell on behalf of the Company, other than certain efficacy studies.

For each product candidate determined by the JSC to be an option candidate, the Company has an exclusive option under the Core Agreement to obtain an exclusive, sublicensable license to research, develop, manufacture and commercialize such candidate in the Artiva Territory for any therapeutic, prophylactic or diagnostic uses in humans, on economic terms to be determined in good faith by the parties. GC Cell retains exclusive rights to the licensed technology in Asia, Australia, and New Zealand, though the Company has the right to request, and GC Cell has agreed to consider in good faith, inclusion of Australia, New Zealand, and/or specific countries in Asia in the Artiva Territory on a product-by-product basis. If the Company elects not to exercise the option with respect to a particular option candidate, GC Cell retains the right to continue development of such candidate. As of March 31, 2024, the Company has exercised its rights to license four option candidates, AB-101, AB-201, AB-202, and AB-205, as described below.

The Company has control over and will bear the costs of the development, regulatory, manufacturing, and commercialization activities relating to the option candidates for which it has exercised its option, each a licensed product. Accordingly, the Company has certain diligence obligations and must use commercially reasonable efforts to develop and seek regulatory approval for each licensed product in at least one indication in the United States and the European Union, and following regulatory approval in a country, to commercialize such licensed product in at least one indication in such country. The Core Agreement provides that the Company has the right to engage GC Cell or its appropriate affiliate to provide research and manufacturing services for the licensed products being developed by the Company in the Artiva Territory under separately executed service agreements.

Under the Core Agreement, the Company is obligated to pay a low single-digit percentage royalty on net sales of any licensed products, the manufacture, use or sale of which is claimed by or uses any Core IP. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. The Company also has the exclusive option to extend its license to the Core IP to be worldwide with respect to products originated from the Company in exchange for a specified increase in the applicable royalty. GC Cell is also obligated to pay the Company a royalty at a rate equal to 50% of the royalty payable by the Company for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. As of March 31, 2024, the Company has not recognized any net sales royalties under this agreement.

AB-101 Selected Product License Agreement

In November 2019, the Company entered into a license agreement with GC Cell for its AB-101 product candidate, as amended in February 2022 ("the AB-101 Agreement"). AB-101 is the first product for which the Company exercised its option under the Core Agreement. Under the AB-101 Agreement, GC Cell granted the Company an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture, and commercialize AB-101.

Under the AB-101 Agreement, the Company is obligated to pay tiered royalties in the low-mid to high single-digit percentage range on annual net sales of any licensed AB-101 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-101 product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. The Company is also obligated to make milestone payments to GC Cell of: (1) up to \$22.0 million upon the first achievement of certain development milestones; and (2) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay the Company a royalty at a rate equal to 50% of the royalty payable by the Company for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-101 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property. As of March 31, 2024, the Company has not recognized any net sales royalties or milestones under this agreement.

AB-201 Selected Product License Agreement

In October 2020, the Company entered into a license agreement with GC Cell for its AB-201 product candidate, as amended in February 2022 ("the AB-201 Agreement"). AB-201 is the second product for which the Company exercised its option under the Core Agreement. Under the AB-201 Agreement, GC Cell granted the Company an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture, and commercialize AB-201.

Under the AB-201 Agreement, the Company is obligated to pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-201 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-201 product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. The Company is also obligated to make milestone payments to GC Cell of: (1) up to \$25.0 million upon the first achievement of certain development milestones; and (2) up to \$55.0 million upon the first achievement of certain sales milestones. GC Cell is also obligated to pay the Company a royalty at a rate equal to 50% of the royalty payable by the Company for such product in the Artiva Territory on net sales outside the Artiva Territory of any licensed AB-201 product, the manufacture, use or sale of which is claimed by or uses any jointly owned intellectual property.

In September 2023, the Company entered an amendment to the AB-201 Agreement ("the Amended AB-201 Agreement"). This amendment granted back GC Cell an exclusive, royalty and milestone bearing license to all information and patents controlled by the Company that relate specifically to the research, development, manufacture and use of AB-201, to be used outside of the Artiva Territory. Under the Amended AB-201 Agreement, the Company will receive tiered royalties in the low single-digit percentage range on annual GC Cell net sales of AB-201 outside of the Artiva Territory. The royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of AB-201 outside of the Artiva Territory and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. The Company will also receive milestone payments upon achievement of certain development milestones, totaling \$1.8 million. In December 2023, GC Cell achieved the first regulatory milestone under the Amended AB-201 Agreement for first IND acceptance for AB-201 outside the Artiva Territory.

[Table of Contents](#)

During the three months ended March 31, 2024, the Company recognized \$0.3 of license and development support-related revenue in the condensed statements of operations and comprehensive loss, related to development support activities under the Amended AB-201 Agreement. As of December 31, 2023 and March 31, 2024, total accounts receivable related to the Amended AB-201 Agreement were \$0.6 million and \$0.8 million, respectively.

AB-205 Selected Product License Agreement

In December 2022, the Company entered into a license agreement with GC Cell for its AB-205 product candidate ("the AB-205 Agreement"). AB-205 is the fourth product for which the Company exercised its option under the Core Agreement. Under the AB-205 Agreement, GC Cell granted the Company an exclusive, royalty-bearing license in the Artiva Territory, with the right to sublicense through multiple tiers, under certain intellectual property and technology owned or controlled by GC Cell, to research, develop, manufacture, and commercialize AB-205.

Under the AB-205 Agreement, the Company is also obligated to pay tiered royalties in the mid to high single-digit percentage range on annual net sales of any licensed AB-205 products. The royalty rate is subject to reduction under certain scenarios, and royalties are payable on a product-by-product and country-by-country basis, beginning with the first commercial sale of a licensed AB-205 product and continuing until the later of: (i) expiration of the last-to-expire claim of the licensed patents and jointly owned patents in the country of sale; (ii) expiration of any regulatory exclusivity for a licensed product in that country; and (iii) the tenth anniversary of the first commercial sale of a licensed product in that country. Upon election by the Company to proceed with clinical development of AB-205 (prior to which the Company may not make, use or sell AB-205 for clinical development purposes), the Company is obligated to pay a one-time payment of \$2.5 million to GC Cell. Thereafter, the Company is also obligated to make milestone payments to GC Cell of: (i) up to \$29.5 million upon the first achievement of certain development milestones, excluding any payments for the Development Cost Share as defined in the AB-205 Agreement; and (ii) up to \$28.0 million upon the first achievement of certain sales milestones. As of March 31, 2024, the Company has not recognized any net sales royalties or milestones under this agreement.

Total reimbursements for development costs invoiced to GC Cell in connection with the AB-205 License Agreement for the three months ended March 31, 2023 and 2024, were \$0 and \$0.1 million, respectively. The Company did not receive any payments from GC Cell during the three months ended March 31, 2023 and 2024. As of December 31, 2023 and March 31, 2024, the Company recorded \$0.6 million and \$0.7 million, respectively, in the condensed balance sheets as other receivable from GC Cell.

Research Services Agreement with GC Cell

As contemplated by the Core Agreement, in August 2020 the Company entered into the GC Cell Research Services Agreement, as amended in February 2022, under which GC Cell agreed to provide research services in support of the research and development of one or more of the products the Company has licensed from GC Cell.

The Agreement provides that the parties will agree to specific projects as work orders under the GC Cell Research Services Agreement. Each work order shall set forth, upon terms mutually agreeable to GC Cell and the Company, the specific services to be performed by GC Cell, the timeline and schedule for the performance of the services, and the compensation to be paid by the Company to GC Cell for the provision of such services, as well as any other relevant terms and conditions (see Note 10).

Master Manufacturing Agreement with GC Cell

In March 2020, the Company entered into a Master Agreement for Manufacturing Services ("the Manufacturing Agreement") with GC Cell, under which GC Cell agreed to manufacture specified products under individual work orders for use in the Company's Phase 1 and Phase 2 clinical trials. Each work order will contain an estimated budget of service fees and out-of-pocket costs to be incurred in the performance of services under the agreement and the work order, as well as additional terms and conditions relating to the estimated budget. The Company will own all results and data generated by GC Cell under the Manufacturing Agreement (see Note 10).

Merck Exclusive License and Collaboration Agreement

In January 2021, the Company entered into the Exclusive License and Research Collaboration Agreement ("the Merck Collaboration Agreement") with Merck Sharp & Dohme Corp. ("Merck") for the discovery, development, manufacture and commercialization of CAR-NK cells that target certain solid tumor antigens. Merck paid the Company \$30.0 million upfront for two target programs under the Merck Collaboration Agreement. As part of the

[Table of Contents](#)

Merck Collaboration Agreement, the Company was also eligible to receive additional payments for achieving certain development, regulatory approval and sales milestones, as well as royalties on net sales. In addition, the Company would be reimbursed for the conduct of each research program, including external research costs and manufacture and supply of clinical material for Phase 1 clinical trials.

Concurrent with entering into the Merck Collaboration Agreement, the Company also entered into an agreement with GC Cell to obtain exclusive, worldwide rights to GC Cell's CAR-NK technology with respect to the licensed products and to engage GC Cell to perform services in support of the research programs ("Partnered Program License Agreement"). The Company agreed to reimburse GC Cell for research and development services as these services were provided. The Company was required to pay GC Cell 100% of regulatory milestones, sales milestones and royalty payments received by Merck relating to products in Asia, Australia and New Zealand and 50% of upfront payments, license fees, regulatory milestones, sales milestones and royalty payments received by Merck relating to products in all other territories.

In October 2023, the Merck Collaboration Agreement and development thereunder was terminated by Merck.

The Company applied ASC 808 to the Merck Collaboration Agreement and determined that the agreements were applicable to such guidance. The Company concluded that Merck represented a customer and applied relevant guidance from ASC 606 to account for the Merck Collaboration Agreement. In accordance with this guidance, the Company identified its performance obligations, including its grant of a license to Merck to certain of its intellectual property subject to certain conditions, transfer of technology, its conduct of research services, and its participation in a joint research committee. The Company determined that its grant of a license to Merck to certain of its intellectual property subject to certain conditions was not distinct from other performance obligations because such grant is dependent on the conduct and results of the research services.

Additionally, the Company determined that its conduct of research services was not distinct from other performance obligations since the research could not be conducted without also delivering the rights to the license, developed intellectual property and technology transfer. Accordingly, the Company determined that all performance obligations should be accounted for as one combined performance obligation for each target program, and that the combined performance obligation is transferred over the expected term of the conduct of the research services, which is collectively estimated to be four years, which represents the combined terms for the research programs ("Expected Research Term").

The Company assessed the upfront, non-refundable and non-creditable payment of \$30.0 million received in January 2021 and concluded that there was not a significant financing component to the Merck Collaboration Agreement.

The Company also assessed the effects of the variable consideration under the Collaboration Agreement. Such assessment evaluated, among other things, the likelihood of receiving: (i) various clinical, regulatory and commercial milestone payments; and (ii) royalties on net sales. Based on its assessment, the Company concluded that given the substantial uncertainty related to their achievement, such variable consideration was not included in the transaction price.

In accordance with ASC 606, the Company determined that the initial transaction price under the Collaboration Agreement equaled \$58.0 million, consisting of the upfront, non-refundable and non-creditable payment of \$30.0 million and the aggregate estimated research and development fees of \$28.0 million. The initial transaction price was allocated evenly to each of the two product targets. The upfront payment of \$30.0 million was recorded as deferred revenue, and was recognized as revenue over the Expected Research Term as the research services were the primary component of the combined performance obligations. Revenue associated with the upfront payment was recognized based on actual costs incurred as a percentage of the estimated total costs expected to be incurred over the Expected Research.

[Table of Contents](#)

The Company assessed the payments made to GC Cell in connection with the Partnered Program License Agreement and concluded that all payments received from Merck and paid to GC Cell should be reflected within the Company's condensed financial statements on a gross basis. The Company recognized payments from Merck as collaboration revenue as the performance obligation was satisfied over time, and payments made to GC Cell were recognized as research and development expense, as incurred.

During the three months ended March 31, 2023 and 2024, total revenue recognized under the Merck Collaboration Agreement was \$1.0 million and \$0, respectively. Over the course of the Merck Collaboration Agreement through March 31, 2024, the Company received \$39.9 million in payments from Merck, of which \$30.0 million related to the upfront fee, and \$9.9 million related to reimbursable research services.

Affirmed Collaboration Agreement

On November 1, 2022, the Company entered into a strategic collaboration agreement with Affirmed GmbH, a subsidiary of Affirmed N.V. for the clinical development and commercialization of a combination therapy, for any uses in humans or animals, comprising Affirmed's product consisting of an innate cell engager referred to as "AFM13" and the Company's product containing an NK cell referred to as AB-101. While the collaboration is initially limited to the United States, the parties will, upon Affirmed's request, in good faith discuss an expansion to certain other territories.

The Company has granted Affirmed, with respect to the development of the combination therapy an exclusive, and with respect to the promotion of the combination therapy under the Affirmed Collaboration Agreement a non-exclusive, non-transferable (except to affiliates and successors in interest), royalty-free and non-sublicensable (with certain exceptions) license under relevant Company patents and know-how. Affirmed has granted the Company a non-exclusive, non-transferable (except to affiliates and successors in interest), royalty-free license and non-sublicensable (with certain exceptions) license under relevant Affirmed patents and know-how for use in the clinical development of the combination therapy under the Affirmed Collaboration Agreement.

The financial terms of the Affirmed Collaboration Agreement provides that Affirmed shall be responsible for all costs associated with the development of the combination therapy (including all clinical trial costs), except that Affirmed and the Company shall each bear 50% of the costs and expenses incurred in connection with the performance of any confirmatory combination therapy clinical trial required by the FDA. The Company shall be solely responsible for all costs incurred by the Company for the supply of AB-101 and IL-2 product used in the clinical trials for the combination therapy, and for carrying out activities assigned to it under the agreed development plan. In addition, under the Affirmed Collaboration Agreement, the parties agree to make payments to each other to achieve a proportion of 67%/33% (Affirmed/Company) of revenues generated by both parties from commercial sales of each party's product as part of the combination therapy.

During the three months ended March 31, 2023 and 2024, the Company incurred \$0.7 million and \$0 in expenses in connection with the Affirmed Collaboration Agreement, respectively.

9. Convertible Preferred Stock and Stockholders' Deficit

Stockholders' Deficit

Under the Amended and Restated Certificate of Incorporation dated September 1, 2022, the Company had a total of 66,018,142 shares of capital stock authorized for issuance, consisting of 38,998,588 shares of common stock, par value of \$0.0001 per share, and 27,019,554 shares of convertible preferred stock, par value of \$0.0001 per share. The Amended and Restated Certificate of Incorporation included the authorization of 370,865 shares reserved under the terms specified as part of the Company's Pledge 1% Movement commitment, in support of its corporate social responsibility and philanthropic pursuits.

Convertible Preferred Stock

In 2020 and 2021, the Company issued 9,110,463 shares and 7,000,000 shares, respectively, of Series A convertible preferred stock at a price of \$5.00 per share, resulting in aggregate gross proceeds of \$70.0 million and total issuance costs of \$0.4 million. The Company converted a promissory note with a fair value of \$10.6 million as part of the first closing and reclassified a convertible preferred stock purchase right liability with a fair value of \$23.7 million into equity as part of the second closing.

[Table of Contents](#)

In 2021, the Company issued 10,909,091 shares of Series B convertible preferred stock at a price of \$11.00 per share resulting in aggregate gross proceeds of \$120.0 million and incurred \$0.4 million of total issuance costs.

As of March 31, 2024, the Company's Series A and Series B convertible preferred stock has been classified as temporary equity in the accompanying condensed balance sheets given that the holders of the convertible preferred stock could cause certain events to occur that are outside of the Company's control whereby the Company could be obligated to redeem the convertible preferred stock. The carrying value of the convertible preferred stock is not adjusted to the redemption value until the contingent redemption events are considered to be probable of occurring.

The Company's convertible preferred stock has the following rights, preferences and privileges:

Dividends

The Company shall not declare, pay or set aside any dividends on shares of any class of capital stock of the Company unless the holders of the Series A or Series B convertible preferred stock shall first receive, or simultaneously receive, a dividend on each outstanding share of the Series A convertible preferred stock equal to an amount as defined in the Company's Amended and Restated Certificate of Incorporation. No such dividends have been declared or paid through March 31, 2024.

Preferences on Liquidation

The holders of the Series A convertible preferred stock are entitled to receive liquidation preferences, in the event of a change in control, at an amount per share equal to the greater of (i) the Series A original issuance price of \$5.00, plus any dividends declared but unpaid or (ii) such amount per share as would have been payable had all shares of Series A convertible preferred stock been converted into common stock. The holders of the Series B convertible preferred stock are entitled to receive liquidation preferences, in the event of a change in control, at an amount per share equal to the greater of (1) the Series B original issuance price of \$11.00, plus any dividends declared but unpaid or (2) such amount per share as would have been payable had all shares of Series B convertible preferred stock been converted into common stock. Liquidation payments to the holders of the Series A and Series B convertible preferred stock have priority and are made in preference to any payments to the holders of common stock.

After full payment of the liquidation preference to the holders of the Series A and Series B convertible preferred stock, the remaining assets, if any, will be distributed ratably to the holders of the common stock.

Conversion Rights

The shares of Series A and Series B convertible preferred stock are convertible into an equal number of shares of common stock, at the option of the holder, subject to certain anti-dilution adjustments. The conversion rate for the convertible preferred stock is determined by dividing the original issue price by the conversion price. The conversion price is initially the original issue price, but is subject to adjustment for dividends, stock splits, and other distributions. The conversion rate at March 31, 2024, for the Series A and Series B convertible preferred stock was 1:1.

Each share of Series A convertible preferred stock will be automatically converted into common stock at the then effective conversion rate upon: (i) the closing of the sale of common stock to the public at a price of at least \$10.00 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$75.0 million of gross proceeds to the Company; or (ii) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of 60% of the outstanding shares of Series A convertible preferred stock. Each share of Series B convertible preferred stock will be automatically converted into common stock at the then effective conversion rate upon: (1) the closing of the sale of Common Stock to the public (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement Securities Act of 1933, as amended, resulting in at least \$75.0 million of gross proceeds to the Company; or (2) the date and time, or the occurrence of an event, specified by vote or written consent of the holders of 60% of the outstanding shares of Series B convertible preferred stock.

[Table of Contents](#)

Redemption Rights

The holders of Series A and Series B convertible preferred stock do not have any redemption rights, except upon certain liquidation events that are outside of the Company's control.

Voting

The holder of each share of Series A and Series B convertible preferred stock generally vote together with the shares of common stock as a single class, but also have class vote approval rights as provided by the Company's certificate of incorporation or as required by applicable law.

Common Stock

The voting, dividend, and liquidation rights of the holders of the common stock are subject to, and qualified by, the rights, preferences and privileges of the holders of the Series A and Series B convertible preferred stock. The holders of the common stock are entitled to one vote for each share of common stock held at all meetings of stockholders.

Common stock reserved for future issuance consisted of the following:

	AS OF	
	DECEMBER 31, 2023	MARCH 31, 2024
Convertible preferred stock	27,019,554	27,019,554
Common stock options granted and outstanding	5,771,251	6,568,326
Restricted stock units granted and outstanding	98,750	98,750
Shares available for issuance under the 2020 Equity Incentive Plan	1,332,221	620,146
Shares available for issuance under the Pledge 1% commitment	370,865	370,865
Total common stock reserved for future issuance	34,592,641	34,677,641

In 2019, the Company issued 280,000 shares of restricted common stock at a price of \$0.01 per share to certain founders of the Company ("Founders Stock"). The Company maintains a repurchase right whereby the Founders Stock are released from such repurchase right over a period of time of continued service by the recipient. Any shares subject to repurchase by the Company are not deemed, for accounting purposes, to be outstanding until those shares vest. As of March 31, 2024, there were no unvested shares of Founders Stock.

Stock Options

In June 2020, the Company adopted the 2020 Equity Incentive Plan (the "Plan"). The Plan provides for the grant of incentive stock options ("ISO"), non-statutory stock options ("NSO"), stock appreciation rights, restricted stock awards, restricted stock unit awards, and other stock awards.

The Plan was amended in December 2020, January 2021, July 2021, and August 2022 to increase the total number of shares reserved under the Plan to 7,889,537.

Options granted under the Plan are exercisable at various dates as determined upon grant and will expire no more than 10 years from their date of grant. The exercise price of each option shall be determined by the board of directors based on the estimated fair value of the Company's stock on the date of the option grant. The exercise price shall not be less than 100% of the fair market value of the Company's common stock at the time the option is granted. Most option grants generally vest 25% on the first anniversary of the original vesting commencement date, with the balance vesting monthly over the remaining three years and early exercise is permitted. The vesting period generally occurs over four years unless there is a specific performance vesting trigger at which time those shares will vest when the performance trigger is probable to occur.

On April 6, 2023, the Company's board of directors approved a stock option repricing (the "Option Repricing") in which the exercise price of certain outstanding options to purchase shares of the Company's common stock under the 2020 Equity Incentive Plan was reduced to \$1.14 per share, the estimated fair value of the Company's common stock as of December 31, 2022. The Option Repricing was intended to motivate holders of options with exercise prices in excess of the estimated fair value of the Company's common stock to remain with the Company and work toward its success. The Option Repricing included options granted pursuant to the 2020 Equity Incentive Plan that were held by, among others, members of the Company's board of directors and the Company's named executive officers.

[Table of Contents](#)

As a result of the Option Repricing, 5,215,705 shares of vested and unvested stock options outstanding as of April 6, 2023, with original exercise prices ranging from \$1.17 to \$11.79 per share, were repriced to an exercise price of \$1.14 per share. The Option Repricing impacted 70 grantees and the total incremental fair value recognized as a result of the repricing was \$1.5 million.

A summary of the Company's stock option activity under the Plan is as follows:

	TOTAL OPTIONS	WEIGHTED-AVERAGE EXERCISE PRICE PER SHARE	WEIGHTED-AVERAGE REMAINING CONTRACTUAL TERM (in years)	AGGREGATE INTRINSIC VALUE (in thousands)
Outstanding at December 31, 2023	5,771,251	\$ 1.14	8.8	\$ 221
Granted	883,679	1.18	—	—
Exercised	—	—	—	—
Cancelled	(86,604)	1.14	—	—
Outstanding at March 31, 2024	<u>6,568,326</u>	<u>\$ 1.15</u>	<u>9.0</u>	<u>\$ 334</u>
Exercisable as of March 31, 2024	<u>3,647,005</u>	<u>\$ 1.14</u>	<u>8.8</u>	<u>\$ 134</u>

The weighted-average grant date fair value of options granted for the three months ended March 31, 2023 and 2024, was \$0.63 and \$0.98 per share, respectively. The total intrinsic value of options exercised during the three months ended March 31, 2023 and 2024, was \$0 and \$0, respectively. Upon the exercise of stock options, the Company will issue new shares of its common stock.

Restricted Stock Unit Awards

Restricted stock unit awards ("RSUs") granted under the Plan are subject to time-based vesting and convert to shares of common stock in accordance with the vesting schedule. RSUs are valued at the estimated fair value of the Company's stock on the date of grant and are amortized over the requisite service period. The total number of RSUs granted represents the maximum number of RSUs eligible to vest based upon the service conditions set forth in the grant agreements. Employees forfeit unvested RSUs upon termination of employment with a corresponding reversal of expense.

During the three months ended March 31, 2023 and 2024, no RSUs were granted by the Company. As of March 31, 2024, 98,750 total RSUs were outstanding.

For the three months ended March 31, 2023 and 2024, the Company recognized \$0.1 million and \$0 of general and administrative stock-based compensation expense, respectively.

Stock-Based Compensation Expense

The following table summarizes stock-based compensation expense by condensed financial statement line item in the Company's statement of operations and comprehensive loss (in thousands):

	THREE MONTHS ENDED MARCH 31,	
	2023	2024
Research and development	\$ 1,029	\$ 767
General and administrative	803	639
Total	<u>\$ 1,832</u>	<u>\$ 1,406</u>

[Table of Contents](#)

In 2023, the Company entered into separation agreements with certain executives, terminating their employment and entering into consulting agreements. Under the separation agreements, service-based requirements for one of the executives were deemed satisfied for all RSUs as of the date of separation. In order for RSUs to vest, there must be a Liquidity event and the RSUs must meet the time and service-based requirement prior to the defined Liquidity Event Deadline. There was no incremental compensation cost recognized during the three months ended March 31, 2023, resulting from the modification of the RSUs. The separation agreements also provided for extended vesting terms of certain options grants through the term of the consulting agreements. Total incremental compensation cost resulting from the modification of the extended vesting terms of certain options grants for the three months ended March 31, 2023, was \$0.2 million in research and development expense.

The assumptions used in the Black-Scholes option pricing model to determine the fair value of the employee and nonemployee stock option grants issued for the three months ended March 31, 2023 and 2024, were as follows:

	THREE MONTHS ENDED MARCH 31,	
	2023	2024
Stock price	\$1.14	\$1.18
Risk-free rate of interest	3.6% - 3.9%	4.1% - 4.2%
Expected term (years)	6.1	5.1 - 6.1
Expected stock price volatility	86.5% - 87.6%	106.2% - 110.5%
Expected dividend yield	—	—

As of March 31, 2024, the unrecognized compensation cost related to outstanding employee and nonemployee options was \$8.0 million and is expected to be recognized as expense over a weighted-average period of 1.9 years. As of March 31, 2024, there was no unrecognized compensation cost related to outstanding RSUs.

10. Related Party Transactions

GC Cell and GC Corp, subsidiaries of Green Cross Corp, are stockholders of the Company and are represented on the Company's board of directors.

In November 2019, October 2020, March 2021, and December 2022, the Company entered into a license agreement (collectively, the "License Agreements") with GC Cell (see Note 8). In August 2020, the Company entered into a Research and Service Agreement with GC Cell in which GC Cell is to provide mutually agreed research services in support of the research and development of one or more of the Selected Products that the Company has licensed from GC Cell under the License Agreements. The Company did not incur any research and development expense in connection with the agreements for the three months ended March 31, 2023 and 2024. As of December 31, 2023 and March 31, 2024, the Company had no accounts payable and accrued expenses in connection with the GC Cell License Agreements and Research Service Agreement.

In September 2023, the Company and GC Cell amended the AB-201 Agreement (see Note 8). For the three months ended March 31, 2024, the Company recognized \$0.3 million of license and development support-related revenue on its condensed statements of operations and comprehensive loss, related to GC Cell's achievement of a defined development milestone and development support activities under the Amended AB-201 Agreement. As of December 31, 2023 and March 31, 2024, total accounts receivable related to the Amended AB-201 Agreement were \$0.6 million and \$0.8 million, respectively.

Under the AB-205 Agreement, GC Cell agreed to reimburse the Company for Direct Costs incurred on behalf of GC Cell in accordance with the Development Plan under the AB-205 Agreement, provided that such reimbursed costs are deemed to form part of the Direct Costs incurred and paid by GC Cell (see Note 8). Total reimbursements for development costs invoiced to GC Cell in connection with the AB-205 Agreement for the three months ended March 31, 2023 and 2024, were \$0 and \$0.1 million, respectively. During the three months ended March 31, 2023 and 2024, the Company did not receive any payments from GC Cell. As of December 31, 2023 and March 31, 2024, the Company had \$0.6 million and \$0.7 million recorded in the condensed balance sheets as other receivable, respectively.

[Table of Contents](#)

In March 2020, the Company entered into the Manufacturing Agreement with GC Cell, where GC Cell is to perform manufacturing services with respect to any biological or chemical product manufactured or to be manufactured for use in Phase 1 or Phase 2 clinical trials. The Company amended the Manufacturing Agreement in June 2020 to include the Company's right to terminate the agreement at will. During the three months ended March 31, 2023 and 2024, the Company incurred \$0.9 million and \$0.3 million, respectively, in research and development expenses in connection with the agreement. As of December 31, 2023 and March 31, 2024, the Company had \$2.4 million and \$1.2 million, respectively, of accounts payable and accrued expenses in connection with the Manufacturing Agreement recorded in the condensed balance sheet.

In January 2021, concurrent with entering into the Merck Collaboration Agreement, the Company also entered into a Partnered Program License Agreement with GC Cell to obtain exclusive, worldwide rights to GC Cell's CAR-NK technology with respect to the licensed products and to engage GC Cell to perform services in support of the research programs. The Company agreed to reimburse GC Cell for research and development services as these services were provided. The Company was required to pay GC Cell 100% of regulatory milestones, sales milestones and royalty payments received by Merck relating to products in Asia, Australia and New Zealand and 50% of upfront payments, license fees, regulatory milestones, sales milestones and royalty payments received by Merck relating to products in all other territories. In October 2023, the Merck Collaboration Agreement and development thereunder was terminated by Merck.

11. Commitments and Contingencies

Operating Leases

The following table presents operating rent expense and related short-term lease costs (in thousands):

	THREE MONTHS ENDED MARCH 31,	
	2023	2024
Rent expense	\$ 1,084	\$ 1,020
Amount of rent expense related to short-term leases	71	71

Future minimum annual obligations under the Company's operating leases with terms in excess of one year are as follows (in thousands):

PERIOD ENDED DECEMBER 31,	
2024 (remaining)	3,043
2025	4,012
2026	3,418
2027	3,520
Thereafter	5,916
Total minimum lease payments	19,909
Less: amount representing interest	(3,651)
Present value of lease liabilities	16,258
Less: current portion of lease liabilities	(3,647)
Lease liabilities, net of current portion	<u>\$ 12,611</u>

[Table of Contents](#)

As the Company's leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at the lease commencement date. The Company's weighted-average remaining term, and weighted-average discount rate were as follows:

	AS OF	
	DECEMBER 31, 2023	MARCH 31, 2024
Weighted-average remaining lease term	5.3 years	5.1 years
Weighted-average discount rate	7.8%	7.8%

On July 22, 2022, the Company entered into a sublease (the "Sublease Agreement") with Origis Operating Services, LLC, (the "Sublessee"), whereby the Company agreed to sublease to Sublessee all of the 13,405 rentable square feet of office space in San Diego, CA currently leased by the Company under the Executive Drive Lease. The sublease commenced on August 1, 2022, and has a term through December 31, 2025. The aggregate base rent is \$2.6 million commencing August 1, 2022. The Company records sublease income as a reduction of general and administrative expense.

The expected undiscounted cash flows to be received from the sublease are as follows (in thousands):

PERIOD ENDED DECEMBER 31,	
2024 (remaining)	\$ 638
2025	873
Total	<u>\$1,511</u>

The Company recognized sublease income of \$0.2 million and \$0.2 million for the three months ended March 31, 2023 and 2024, respectively.

12. Subsequent Events

For purposes of the condensed financial statements as of March 31, 2024, and the three months then ended, the Company has evaluated the subsequent events through June 7, 2024, the date the condensed financial statements were issued.

On April 29, 2024, the Board approved an amendment to the Company's Amended and Restated Certificate of Incorporation. The amendment increased the number of authorized shares of common stock to 40,248,588 and increased the number of common stock reserved for issuance under the 2020 Equity Incentive Plan to 9,139,537.

During the period from April 1 through June 7, 2024, the Company granted stock options under the Plan to purchase an aggregate of 566,000 shares of its common stock at a weighted-average exercise price of \$3.07 per share. Additionally, the Company granted stock options under the Plan to purchase an aggregate of 855,000 shares of its common stock at a weighted-average exercise price of \$3.07 per share. If the Company does not complete an IPO by December 31, 2024, or if the Company withdraws its S-1 registration statement that is filed with the Securities Exchange Commission, these stock options will be cancelled.

Shares



ARTIVA BIOTHERAPEUTICS, INC.

Common Stock

PRELIMINARY PROSPECTUS

**Jefferies
TD Cowen
Cantor
Wedbush PacGrow
Needham & Company**

, 2024

Through and including , 2024 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

PART II**INFORMATION NOT REQUIRED IN PROSPECTUS****Item 13. Other Expenses of Issuance and Distribution.**

The following table indicates the expenses to be incurred in connection with the offering described in this registration statement, other than underwriting discounts and commissions, all of which will be paid by us. All amounts are estimated except the U.S. Securities and Exchange Commission (SEC), registration fee, the Financial Industry Regulatory Authority, Inc., (FINRA), filing fee and the Nasdaq Global Market listing fee.

	AMOUNT PAID OR TO BE PAID
SEC registration fee	\$ 14,760
FINRA filing fee	15,500
Nasdaq Global Market listing fee	*
Accountants' fees and expenses	*
Legal fees and expenses	*
Blue Sky fees and expenses	*
Transfer agent's fees and expenses	*
Printing and engraving expenses	*
Miscellaneous expenses	*
Total	\$ *

* To be provided by amendment.

Item 14. Indemnification of Directors and Officers.

As permitted by Sections 102 and 145 of the Delaware General Corporation Law, we have adopted provisions in our amended and restated certificate of incorporation and amended and restated bylaws that limit or eliminate the personal liability of our directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the corporation, directors exercise an informed business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any act related to unlawful stock repurchases, redemptions or other distributions or payment of dividends; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. Our amended and restated certificate of incorporation also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under Delaware law.

As permitted by Section 145 of the Delaware General Corporation Law, our amended and restated bylaws provide that:

- we may indemnify our directors, officers, employees and other agents to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions;
- we may advance expenses to our directors, officers and employees in connection with a legal proceeding to the fullest extent permitted by the Delaware General Corporation Law, subject to limited exceptions; and
- the rights provided in our bylaws are not exclusive.

Our amended and restated certificate of incorporation and our bylaws, as amended, provide for the indemnification provisions described above and elsewhere herein. We have entered or will enter into, and intend to continue to enter into, separate indemnification agreements with our directors and officers that may be broader than the specific

[Table of Contents](#)

indemnification provisions contained in the Delaware General Corporation Law. These indemnification agreements generally require us, among other things, to indemnify our officers and directors against certain liabilities that may arise by reason of their status or service as directors or officers, other than liabilities arising from willful misconduct. These indemnification agreements also generally require us to advance any expenses incurred by the directors or officers as a result of any proceeding against them as to which they could be indemnified. These indemnification provisions and the indemnification agreements may be sufficiently broad to permit indemnification of our officers and directors for liabilities, including reimbursement of expenses incurred, arising under the Securities Act of 1933, as amended (Securities Act).

We have purchased and currently intend to maintain insurance on behalf of each and every person who is one of our directors or officers, within the limits and subject to the terms and conditions thereof, against any loss arising from any claim asserted against him or her and incurred by him or her in any such capacity, subject to certain exclusions.

The form of underwriting agreement to be entered into in connection with this initial public offering provides for indemnification by the underwriters of us and our officers and directors who sign this registration statement for specified liabilities, including matters arising under the Securities Act.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding securities issued and options granted by us since January 1, 2021 that were not registered under the Securities Act. Also included is the consideration, if any, received by us, for such securities and options and information relating to the Securities Act, or rule of the SEC, under which exemption from registration was claimed.

(1) In January 2021, pursuant to the Series A Preferred Stock Purchase Agreement, we sold and issued an aggregate of 7,000,000 shares of our Series A convertible preferred stock to accredited investors at a purchase price of \$5.00 per share for aggregate gross proceeds of \$35.0 million.

(2) In February 2021, pursuant to a Series B Preferred Stock Purchase Agreement, we sold and issued an aggregate of 10,909,091 shares of our Series B convertible preferred stock to accredited investors at a purchase price of \$11.00 per share, for aggregate gross proceeds of \$120.0 million.

(3) In September 2023 and November 2023, we issued simple agreements for future equity to various investors in the aggregate amount of approximately \$24.4 million.

(4) From January 2021 through the date of this registration statement, we granted under our 2020 Equity Incentive Plan (i) stock options to purchase an aggregate of 6,766,187 shares of our common stock at a weighted-average exercise price of \$4.30 per share and (ii) an aggregate of 98,750 restricted stock units, to certain of our employees, directors and consultants in connection with services provided to us by such persons. From January 2021 through the date of this registration statement, we have issued an aggregate of 452,150 shares of our common stock upon exercise of stock options for an approximate aggregate consideration of \$0.3 million.

The offers, sales and issuances of the securities described in paragraphs (1) through (3) were deemed to be exempt from registration under the Securities Act in reliance on Section 4(a)(2) (or Regulation D promulgated thereunder). The recipients of securities in each of these transactions acquired the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions was able to bear the investment's economic risk and had access to the type of information normally provided in a prospectus for a registered securities offering.

The offers, sales and issuances of the securities described in paragraph (4) were deemed to be exempt from registration under the Securities Act in reliance on Rule 701 in that the transactions were under compensatory benefit plans and contracts relating to compensation as provided under Rule 701 or Section 4(a)(2). The recipients of such securities were our employees, directors or bona fide consultants and received the securities under our 2024 Equity Incentive Plan.

[Table of Contents](#)

Appropriate legends were affixed to the securities issued in these transactions. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about us.

Item 16. Exhibits and Financial Statement Schedules.

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
1.1†	Form of Underwriting Agreement.
3.1	Amended and Restated Certificate of Incorporation, as currently in effect.
3.2	Form of Amended and Restated Certificate of Incorporation to become effective immediately prior to the completion of the offering.
3.3	Bylaws, as amended, as currently in effect.
3.4	Form of Amended and Restated Bylaws to become effective upon the completion of the offering.
4.1	Form of Common Stock Certificate.
4.2	Amended and Restated Investors' Rights Agreement, dated February 22, 2021, by and among the Registrant and certain of its stockholders.
5.1†	Opinion of Cooley LLP.
10.1+	Form of Indemnification Agreement by and between the Registrant and its directors and officers.
10.2+	Artiva Biotherapeutics, Inc. 2020 Equity Incentive Plan, as amended.
10.3+	Forms of Stock Option Grant Notice, Stock Option Grant Notice with Acceleration of Vesting, Option Agreement and Notice of Exercise under the Artiva Biotherapeutics, Inc. 2020 Equity Incentive Plan.
10.4+	Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan.
10.5+	Forms of Stock Option Grant Notice, Option Agreement and Notice of Exercise under the Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan.
10.6+	Forms of Restricted Stock Unit Grant Notice and Award Agreement under the Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan.
10.7+	Artiva Biotherapeutics, Inc. 2024 Employee Stock Purchase Plan.
10.8+†	Non-Employee Director Compensation Policy.
10.9+	Executive Employment Agreement, dated December 14, 2020, as amended, by and between the Registrant and Fred Aslan, M.D.
10.10+	Employment Offer Letter, dated May 21, 2022, by and between the Registrant and Thorsten Graef, M.D., Ph.D.
10.11+	Employment Offer Letter, dated August 27, 2020, as amended, by and between the Registrant and Jennifer Bush.
10.12	Office Lease, dated June 12, 2019, by and between the Registrant and AAT La Jolla Commons, LLC (as successor-in-interest to HSPFLa Jolla Commons I Investors LLC).
10.13*	Option and License Agreement, dated September 4, 2019, by and between the Registrant and GC Cell Corporation (f/k/a GC Lab Cell Corporation).
10.14	Amendment No. 1 to Option and License Agreement, dated June 23, 2020, by and between the Registrant and GC Cell Corporation.
10.15	Omnibus Amendment, dated February 3, 2022, by and between the Registrant and GC Cell Corporation.
10.16*	Master Agreement for Manufacturing Services, dated March 16, 2020, by and between the Registrant and GC Cell Corporation (f/k/a GC Lab Cell Corporation).
10.17	Amendment No. 1 to Master Agreement for Manufacturing Services, dated June 16, 2020, by and between the Registrant and GC Cell Corporation.

Table of Contents

EXHIBIT NUMBER	DESCRIPTION OF DOCUMENT
10.18*	<u>Master Research Services Agreement, dated August 3, 2020, by and between the Registrant and GC Cell Corporation.</u>
10.19*	<u>Selected Product License Agreement (AB-101), dated November 21, 2019, by and between the Registrant and GC Cell Corporation.</u>
10.20*	<u>Selected Product License Agreement (AB-201), dated September 29, 2020, by and between the Registrant and GC Cell Corporation.</u>
10.21*	<u>Amendment to Selected Product License Agreement (AB-201), dated September 6, 2023, by and between the Registrant and GC Cell Corporation.</u>
10.22	<u>Lease Agreement, dated June 16, 2021, by and between the Registrant and ARE-SD Region No. 66, LLC.</u>
10.23	<u>License Agreement, dated June 16, 2021, by and between the Registrant and ARE-SD Region No. 37, LLC.</u>
10.24	<u>First Amendment to License Agreement, dated May 9, 2022, by and between the Registrant and ARE-SD Region No. 37, LLC.</u>
10.25*	<u>Selected Product License Agreement (CD5), dated December 20, 2022, by and between the Registrant and GC Cell Corporation.</u>
10.26*	<u>Collaboration Agreement, dated November 1, 2022, by and between the Registrant and Affimed GmbH.</u>
10.27	<u>Amendment No. 1 to Collaboration Agreement, dated November 14, 2022, by and between the Registrant and Affimed GmbH.</u>
10.28	<u>Amendment No. 2 to Collaboration Agreement, dated June 30, 2023, by and between the Registrant and Affimed GmbH.</u>
10.29+	<u>Employment Offer Letter, dated December 7, 2021, by and between the Registrant and Christopher P. Horan.</u>
10.30+	<u>Consulting Agreement dated April 3, 2023, as amended, by and between the Registrant and MEF Consulting LLC.</u>
10.31+	<u>Amendment No. 1 to Consulting Agreement dated October 3, 2023, by and between the Registrant and MEF Consulting LLC.</u>
10.32+	<u>Separation Agreement dated April 11, 2023, by and between the Registrant and Michael Faerm.</u>
10.33+	<u>Separation Agreement dated March 31, 2023, by and between the Registrant and Peter Flynn, Ph.D.</u>
10.34+	<u>Consulting Agreement dated March 31, 2023, by and between the Registrant and Peter Flynn, Ph.D.</u>
10.35+	<u>Amendment No. 1 to Consulting Agreement dated September 1, 2023, by and between the Registrant and Peter Flynn, Ph.D.</u>
10.36+	<u>Employment Offer Letter, dated April 15, 2024, by and between the Registrant and Neha Krishnamohan.</u>
10.37+	<u>Employment Offer Letter, dated September 17, 2020, by and between the Registrant and Heather Raymon, Ph.D.</u>
10.38+	<u>Consulting Agreement dated November 1, 2023, as amended, by and between the Registrant and Diego Miralles, M.D.</u>
23.1	<u>Consent of Independent Registered Public Accounting Firm.</u>
23.2†	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
24.1	<u>Power of Attorney.</u>
107	<u>Filing Fee Disclosure and Payment Methods.</u>

† To be filed by amendment.

+ Indicates management contract or compensatory plan.

* Pursuant to Item 601(b)(10) of Regulation S-K, certain portions of this exhibit have been omitted (indicated by "[***]") because the Registrant has determined that the information is not material and is the type that the Registrant treats as private or confidential.

[Table of Contents](#)

(b) Financial statement schedules.

No financial statement schedules are provided because the information called for is not required or is shown either in the financial statements or the notes thereto.

Item 17. Undertakings.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the Underwriting Agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(a) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(b) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of San Diego, California, on June 28, 2024.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan, M.D.
Fred Aslan, M.D.
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Fred Aslan, M.D. and Neha Krishnamohan and each of them, as his or her true and lawful attorneys-in-fact and agents, and each of them, with the full power of substitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any and all amendments to this registration statement (including post-effective amendments), and to sign any registration statement for the same offering covered by this registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
<u>/s/ Fred Aslan, M.D.</u> Fred Aslan, M.D.	President, Chief Executive Officer and Director (<i>Principal Executive Officer</i>)	June 28, 2024
<u>/s/ Neha Krishnamohan</u> Neha Krishnamohan	Chief Financial Officer and EVP, Corporate Development (<i>Principal Financial and Accounting Officer</i>)	June 28, 2024
<u>/s/ Brian Daniels, M.D.</u> Brian Daniels, M.D.	Chairperson of the Board of Directors	June 28, 2024
<u>/s/ Laura Bessen, M.D.</u> Laura Bessen, M.D.	Director	June 28, 2024
<u>/s/ James Park</u> James Park	Director	June 28, 2024
<u>/s/ Elizabeth Hougen</u> Elizabeth Hougen	Director	June 28, 2024

[Table of Contents](#)

SIGNATURE	TITLE	DATE
/s/ Yong-Jun Huh Yong-Jun Huh	Director	June 28, 2024
/s/ Diego Miralles, M.D. Diego Miralles, M.D.	Director	June 28, 2024
/s/ Laura Stoppel, Ph.D. Laura Stoppel, Ph.D.	Director	June 28, 2024
/s/ Yvonne Yamanaka, Ph.D. Yvonne Yamanaka, Ph.D.	Director	June 28, 2024

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
ARTIVA BIOTHERAPEUTICS, INC.**

(Pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware)

Artiva Biotherapeutics, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**General Corporation Law**”),

DOES HEREBY CERTIFY:

1. That the name of this corporation is Artiva Biotherapeutics, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on February 14, 2019 under the name Artiva Biotherapeutics, Inc.

2. That the Board of Directors of the Corporation (the “**Board of Directors**”) duly adopted resolutions proposing to amend and restate the Amended and Restated Certificate of Incorporation of this corporation, as amended (the “**Prior Certificate**”), declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

RESOLVED, that the Prior Certificate be amended and restated in its entirety to read as follows:

FIRST: The name of this corporation is Artiva Biotherapeutics, Inc. (the “**Corporation**”).

SECOND: The address of the registered office of the Corporation in the State of Delaware is 838 Walker Road, Suite 21-2, in the City of Dover, County of Kent 19904. The name of its registered agent at such address is Corp2000.

THIRD: The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law.

FOURTH: The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 36,627,272 shares of Common Stock, \$0.0001 par value per share (“**Common Stock**”) and (ii) 27,019,554 shares of Preferred Stock, \$0.0001 par value per share (“**Preferred Stock**”).

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof in respect of each class of capital stock of the Corporation.

A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote for each share of Common Stock held at all meetings of stockholders (and written actions in lieu of meetings); provided, however, that, except as otherwise required by law, holders of Common Stock, as such, shall not be entitled to vote on any amendment to this Amended and Restated Certificate of Incorporation (this “**Certificate of Incorporation**”) that relates solely to the terms of one or more outstanding series of Preferred Stock if the

holders of such affected series are entitled, either separately or together with the holders of one or more other such series, to vote thereon pursuant to this Certificate of Incorporation or pursuant to the General Corporation Law. No person entitled to vote at an election for directors may cumulate votes to which such person is entitled, unless, at the time of such election, the Corporation is subject to Section 2115 of the California Corporations Code. During such time or times that the Corporation is subject to Section 2115(b) of the California Corporations Code, every stockholder entitled to vote at an election for directors may cumulate such stockholder's votes and give one candidate a number of votes equal to the number of directors to be elected multiplied by the number of votes to which such stockholder's shares are otherwise entitled, or distribute the stockholder's votes on the same principle among as many candidates as such stockholder desires. No stockholder, however, shall be entitled to so cumulate such stockholder's votes unless (i) the names of such candidate or candidates have been placed in nomination prior to the voting, and (ii) the stockholder has given notice at the meeting, prior to the voting, of such stockholder's intention to cumulate such stockholder's votes. If any stockholder has given proper notice to cumulate votes, all stockholders may cumulate their votes for any candidates who have been properly placed in nomination. Under cumulative voting, the candidates receiving the highest number of votes, up to the number of directors to be elected, are elected. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of this Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

B. PREFERRED STOCK

16,110,463 shares of the authorized Preferred Stock of the Corporation are hereby designated "Series A Preferred Stock" (the "**Series A Preferred Stock**") and 10,909,091 shares of the authorized Preferred Stock of the Corporation are hereby designated "Series B Preferred Stock" (the "**Series B Preferred Stock**"), and together with the Series A Preferred Stock, the "**Series Preferred Stock**"). The rights, preferences, powers, privileges and restrictions, qualifications and limitations of the Series Preferred are as follows. Unless otherwise indicated, references to "sections" or "subsections" in this Part B of this Article Fourth refer to sections and subsections of Part B of this Article Fourth.

1. Dividends.

The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock) unless (in addition to the obtaining of any consents required elsewhere in this Certificate of Incorporation) the holders of the Series Preferred Stock then outstanding shall first receive, or simultaneously receive, a dividend on each outstanding share of Series Preferred Stock in an amount at least equal to (i) in the case of a dividend on Common Stock or any class or series that is convertible into Common Stock, that dividend per share of Series Preferred Stock as would equal the product of (A) the dividend payable on each share of such class or series determined, if applicable, as if all shares of such class or series had been converted into Common Stock and (B) the number of shares of Common Stock issuable upon conversion of a share of Series Preferred Stock, in each case calculated on the record date for determination of holders entitled to receive such dividend or (ii) in the case of a dividend on any class or series that is not convertible into Common Stock, at a rate per share of Series Preferred Stock determined by (A) dividing the amount of the dividend payable on each share of such class or series of capital stock by the original issuance price of such class or series of capital stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such class or series) and (B) multiplying such fraction by an amount equal to the applicable Series Preferred Original Issue Price (as defined below); *provided that*, if the Corporation declares, pays or sets aside, on

the same date, a dividend on shares of more than one class or series of capital stock of the Corporation, the dividend payable to the holders of Series Preferred Stock pursuant to this Section 1 shall be calculated based upon the dividend on the class or series of capital stock that would result in the highest dividend to the holders of Series Preferred Stock. The “**Series Preferred Original Issue Price**” of (i) the Series A Preferred Stock shall be \$5.00 per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such shares after the filing date hereof) and (ii) the Series B Preferred Stock shall be \$11.00 per share (as adjusted for any stock dividends, combinations, splits, recapitalizations and the like with respect to such shares after the filing date hereof). Such dividends shall be non-cumulative and payable only when, as and if declared by the Board of Directors.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Series Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, the holders of shares of Series Preferred Stock then outstanding, on a pari passu basis, shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders or, in the event of a Deemed Liquidation Event (as defined below), out of the consideration payable to stockholders in such Deemed Liquidation Event or out of the Available Proceeds (as defined below), as applicable, before any payment shall be made to the holders of Common Stock by reason of their ownership thereof, an amount per share equal to the greater of (i) the applicable Series Preferred Original Issue Price, plus any dividends declared but unpaid thereon or (ii) such amount per share as would have been payable had all shares of such series of Series Preferred Stock been converted into Common Stock pursuant to Section 4 immediately prior to such liquidation, dissolution, winding up or Deemed Liquidation Event (the amount payable pursuant to this sentence is hereinafter referred to as the “**Series Preferred Stock Liquidation Amount**”). If upon any such liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series Preferred Stock the full amount to which they shall be entitled under this Section 2.1, the holders of shares of Series Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

2.2 Payments to Holders of Common Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation, after the payment in full of all Series Preferred Stock Liquidation Amounts required to be paid to the holders of shares of Series Preferred Stock, the remaining assets of the Corporation available for distribution to its stockholders or, in the case of a Deemed Liquidation Event, the consideration not payable to the holders of shares of Series Preferred Stock pursuant to Section 2.1 or the remaining Available Proceeds, as the case may be, shall be distributed among the holders of shares of Common Stock, pro rata, based on the number of shares held by each such holder.

2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a “**Deemed Liquidation Event**” unless the holders of at least a majority of the outstanding shares of Series Preferred Stock (the “**Requisite Holders**”) together as a single class on an as-converted to Common Stock basis, elect otherwise by written notice sent to the Corporation at least 15 business days prior to the effective date of any such event:

- (a) a merger or consolidation in which
 - (i) the Corporation is a constituent party or

(ii) a subsidiary of the Corporation is a constituent party and the Corporation issues shares of its capital stock pursuant to such merger or consolidation,

except any such merger or consolidation involving the Corporation or a subsidiary in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, a majority, by voting power, of the capital stock of (1) the surviving or resulting corporation; or (2) if the surviving or resulting corporation is a wholly owned subsidiary of another corporation immediately following such merger or consolidation, the parent corporation of such surviving or resulting corporation; or

(b) (1) the sale, lease, transfer, exclusive license or other disposition, in a single transaction or series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole, or (2) the sale or disposition (whether by merger, consolidation or otherwise, and whether in a single transaction or a series of related transactions) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer, exclusive license or other disposition is to a wholly owned subsidiary of the Corporation.

2.3.2 Effecting a Deemed Liquidation Event.

(a) The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Section 2.3.1(a)(i) unless the agreement or plan of merger or consolidation for such transaction (the “**Merger Agreement**”) provides that the consideration payable to the stockholders of the Corporation in such Deemed Liquidation Event shall be paid to the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2.

(b) In the event of a Deemed Liquidation Event referred to in Section 2.3.1(a)(ii) or 2.3.1(b), if the Corporation does not effect a dissolution of the Corporation under the General Corporation Law within 90 days after such Deemed Liquidation Event, then (i) the Corporation shall send a written notice to each holder of Series Preferred Stock no later than the 90th day after the Deemed Liquidation Event advising such holders of their right (and the requirements to be met to secure such right) pursuant to the terms of the following clause; (ii) to require the redemption of such shares of Preferred Stock, and (iii) if the Requisite Holders so request in a written instrument delivered to the Corporation not later than 120 days after such Deemed Liquidation Event, the Corporation shall use the consideration received by the Corporation for such Deemed Liquidation Event (net of any retained liabilities associated with the assets sold or technology licensed, as determined in good faith by the Board of Directors), together with any other assets of the Corporation available for distribution to its stockholders, all to the extent permitted by Delaware law governing distributions to stockholders (the “**Available Proceeds**”), on the 150th day after such Deemed Liquidation Event, to redeem all outstanding shares of Series Preferred Stock at a price per share equal to the Series Preferred Stock Liquidation Amount. Notwithstanding the foregoing, in the event of a redemption pursuant to the preceding sentence, if the Available Proceeds are not sufficient to redeem all outstanding shares of Series Preferred Stock, the Corporation shall redeem a pro rata portion of each holder’s shares of Series Preferred Stock to the fullest extent of such Available Proceeds, based on the respective amounts which would otherwise be payable in respect of the shares to be redeemed if the Available Proceeds were sufficient to redeem all such shares, and shall redeem the remaining shares as soon as it may lawfully do so under Delaware law governing distributions to stockholders. Prior to the distribution or redemption provided for in this Section 2.3.2(b), the Corporation shall not expend or dissipate the consideration received for such Deemed Liquidation Event, except to discharge expenses incurred in connection with such Deemed Liquidation Event or in the ordinary course of business.

2.3.3 Amount Deemed Paid or Distributed. The amount deemed paid or distributed to the holders of capital stock of the Corporation upon any such merger, consolidation, sale, transfer, exclusive license, other disposition or redemption shall be the cash or the value of the property, rights or securities to be paid or distributed to such holders pursuant to such Deemed Liquidation Event. The value of such property, rights or securities shall be determined in good faith by the Board of Directors.

2.3.4 Allocation of Escrow and Contingent Consideration. In the event of a Deemed Liquidation Event pursuant to Section 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is payable only upon satisfaction of contingencies (the “**Additional Consideration**”), the Merger Agreement shall provide that (a) the portion of such consideration that is not Additional Consideration (such portion, the “**Initial Consideration**”) shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event; and (b) any Additional Consideration which becomes payable to the stockholders of the Corporation upon satisfaction of such contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Sections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration and any previous distributions of Additional Consideration as part of the same transaction. For the purposes of this Section 2.3.4, consideration placed into escrow or retained as a holdback to be available for satisfaction of indemnification or similar obligations in connection with such Deemed Liquidation Event shall be deemed to be Additional Consideration.

3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Series Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Series Preferred Stock held by such holder are convertible as of the record date for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of this Certificate of Incorporation, holders of Series Preferred Stock shall vote together with the holders of Common Stock as a single class and on an as-converted to Common Stock basis.

3.2 Election of Directors. The holders of record of the shares of Series B Preferred Stock, exclusively and as a separate class, shall be entitled to elect one director of the Corporation (the “**Series B Director**”). The holders of record of the shares of Series A Preferred Stock, exclusively and as a separate class, shall be entitled to elect three directors of the Corporation (together with the Series B Directors, the “**Preferred Directors**”). The holders of record of the shares of Common Stock, exclusively and as a separate class, shall be entitled to elect three directors of the Corporation. Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the holders of the shares of the class or series of capital stock entitled to elect such director or directors, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of stockholders. If the holders of shares of Series B Preferred Stock, Series A Preferred Stock or Common Stock, as the case may be, fail to elect a sufficient number of directors to fill all directorships for which they are entitled to elect directors, voting exclusively and as a separate class, pursuant to the first sentence of this Section 3.2, then any directorship not so filled shall remain vacant until such time as the holders of the Series B Preferred Stock, Series A Preferred Stock or Common Stock, as the case may be, elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Common Stock and of any other class or series of voting stock (including the Series A Preferred Stock and Series B Preferred Stock), exclusively and voting together as a single class, shall be

entitled to elect the balance of the total number of directors of the Corporation. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Section 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Section 3.2. The rights of the holders of the (i) Series B Preferred Stock under the first sentence of this Section 3.2 and (ii) Series A Preferred Stock under the second sentence of this Section 3.2 shall terminate on the first date following the Series B Original Issue Date (as defined below) on which there are no issued and outstanding shares of Series B Preferred Stock or Series A Preferred Stock, respectively (subject to appropriate adjustment in the event of any stock dividend, stock split, combination, or other similar recapitalization with respect to such series of Preferred Stock).

3.3 Series Preferred Stock Protective Provisions. At any time when shares of Series Preferred Stock are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or this Certificate of Incorporation) the written consent or affirmative vote of the Requisite Holders given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a single class and on an as-converted to Common Stock basis, and any such act or transaction entered into without such consent or vote shall be null and void *ab initio*, and of no force or effect:

(a) liquidate, dissolve or wind-up the business and affairs of the Corporation, effect any merger or consolidation or any other Deemed Liquidation Event, or consent to any of the foregoing;

(b) amend, waive, alter or repeal any provision of this Certificate of Incorporation or the Bylaws of the Corporation;

(c) create, or authorize the creation of, or issue or obligate itself to issue shares of, any additional class or series of capital stock unless the same ranks junior to the Series Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption, or increase the authorized number of shares of Series Preferred Stock or increase the authorized number of shares of any additional class or series of capital stock of the Corporation unless the same ranks junior to the Series Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends and rights of redemption;

(d) (i) reclassify, alter or amend any existing security of the Corporation that is *pari passu* with the Series Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to the Series Preferred Stock in respect of any such right, preference, or privilege or (ii) reclassify, alter or amend any existing security of the Corporation that is junior to the Series Preferred Stock in respect of the distribution of assets on the liquidation, dissolution or winding up of the Corporation, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or *pari passu* with the Series Preferred Stock in respect of any such right, preference or privilege;

(e) purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) dividends or distributions on the Series Preferred Stock as expressly authorized herein, (ii) dividends or other distributions payable on the Common Stock solely in the form of additional shares of

Common Stock and (iii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at the lower of the original purchase price or the then-current fair market value thereof or (iv) as approved by the Board of Directors, including the approval of at least two Preferred Directors;

(f) create, or authorize the creation of, or issue, or authorize the issuance of any debt security or create any lien or security interest (except for purchase money liens or statutory liens of landlords, mechanics, materialmen, workmen, warehousemen and other similar persons arising or incurred in the ordinary course of business) or incur other indebtedness for borrowed money, including but not limited to obligations and contingent obligations under guarantees, or permit any subsidiary to take any such action with respect to any debt security lien, security interest or other indebtedness for borrowed money other than equipment leases, bank lines of credit or trade payables incurred in the ordinary course of business, unless such debt security has received the prior approval of the Board of Directors, including the approval of at least two Preferred Directors;

(g) create, or hold capital stock in, any subsidiary that is not wholly owned (either directly or through one or more other subsidiaries) by the Corporation, or permit any subsidiary to create, or authorize the creation of, or issue or obligate itself to issue, any shares of any class or series of capital stock, or sell, transfer or otherwise dispose of any capital stock of any direct or indirect subsidiary of the Corporation, or permit any direct or indirect subsidiary to sell, lease, transfer, exclusively license or otherwise dispose (in a single transaction or series of related transactions) of all or substantially all of the assets of such subsidiary; or

(h) increase or decrease the authorized number of directors constituting the Board of Directors, unless such increase or decrease has received the prior approval of the Board of Directors, including the approval of at least two Preferred Directors.

4. Optional Conversion.

The holders of the Preferred Stock shall have conversion rights as follows (the “**Conversion Rights**”):

4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of Series Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing the applicable Series Preferred Original Issue Price by the Series Preferred Conversion Price (as defined below) in effect at the time of conversion; provided that such holder may waive such option to convert upon written notice to the Corporation. As of the filing date hereof, the “**Series Preferred Conversion Price**” for a series of Series Preferred Stock is equal to the applicable Series Preferred Original Issue Price. Such initial Series Preferred Conversion Price, and the rate at which shares of applicable Series Preferred Stock may be converted into shares of Common Stock, shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any such amounts distributable on such event to the holders of Series Preferred Stock; provided that the foregoing termination of Conversion Rights shall not affect the amount(s) otherwise paid or payable in accordance with Section 2.1 to holders of Preferred Stock pursuant to such liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Series Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Series Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Series Preferred Stock to voluntarily convert shares of Series Preferred Stock into shares of Common Stock, such holder shall (a) provide written notice to the Corporation's transfer agent at the office of the transfer agent for the Series Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent) that such holder elects to convert all or any number of such holder's shares of Series Preferred Stock and, if applicable, any event on which such conversion is contingent and (b), if such holder's shares are certificated, surrender the certificate or certificates for such shares of Series Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Series Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent). Such notice shall state such holder's name or the names of the nominees in which such holder wishes the shares of Common Stock to be issued. If required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such notice and, if applicable, certificates (or lost certificate affidavit and agreement) shall be the time of conversion (the "**Conversion Time**"), and the shares of Common Stock issuable upon conversion of the specified shares shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time (i) issue and deliver to such holder of Series Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Series Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Section 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends on the shares of Series Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Series Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Series Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Series Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Certificate of Incorporation. Before taking any action which would cause an

adjustment reducing the Series Preferred Conversion Price below the then par value of the shares of Common Stock issuable upon conversion of the Series Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and non-assessable shares of Common Stock at such adjusted Series Preferred Conversion Price.

4.3.3 Effect of Conversion. All shares of Series Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Section 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Series Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Series Preferred Conversion Price shall be made for any declared but unpaid dividends on the Series Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issue and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Series Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Series Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Series Preferred Conversion Price for Diluting Issues.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) **“Option”** shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(b) **“Series B Original Issue Date”** shall mean the date on which the first share of Series B Preferred Stock was issued.

(c) **“Convertible Securities”** shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock, but excluding Options.

(d) **“Additional Shares of Common Stock”** shall mean all shares of Common Stock issued (or, pursuant to Section 4.4.3 below, deemed to be issued) by the Corporation after the Series B Original Issue Date, other than (1) the following shares of Common Stock and (2) shares of Common Stock deemed issued pursuant to the following Options and Convertible Securities (clauses (1) and (2), collectively, **“Exempted Securities”**):

(i) shares of Common Stock, Options or Convertible Securities issued as a dividend or distribution on Series Preferred Stock;

(ii) shares of Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock that is covered by Section 4.5, 4.6, 4.7 or 4.8;

(iii) shares of Common Stock or Options issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors, including the approval of at least two Preferred Directors;

(iv) shares of Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(v) shares of Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, pursuant to a debt financing, equipment leasing or real property leasing transaction approved by the Board of Directors, including the approval of at least two Preferred Directors;

(vi) shares of Common Stock, Options or Convertible Securities issued in connection with sponsored research, collaboration, technology license, development, original equipment manufacturing, marketing or other similar agreements or strategic partnerships approved by the Board of Directors, including the approval of at least two Preferred Directors; or

(vii) any securities deemed to be Exempted Securities by the Requisite Holders.

4.4.2 No Adjustment of Series Preferred Conversion Price. No adjustment in any Series Preferred Conversion Price shall be made as the result of the issuance or deemed issuance of Additional Shares of Common Stock if the Corporation receives written notice from the Requisite Holders agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Common Stock.

4.4.3 Deemed Issue of Additional Shares of Common Stock.

(a) If the Corporation at any time or from time to time after the Series B Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to a Series Preferred Conversion Price pursuant to the terms of Section 4.4.4, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, such Series Preferred Conversion Price computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Series Preferred Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing a Series Preferred Conversion Price to an amount which exceeds the lower of (i) the Series Preferred Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) the Series Preferred Conversion Price that would have resulted from any issuances of Additional Shares of Common Stock (other than deemed issuances of Additional Shares of Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to a Series Preferred Conversion Price pursuant to the terms of Section 4.4.4 (either because the consideration per share (determined pursuant to Section 4.4.5) of the Additional Shares of Common Stock subject thereto was equal to or greater than such Series Preferred Conversion Price then in effect, or because such Option or Convertible Security was issued before the Series B Original Issue Date), are revised after the Series B Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Common Stock subject thereto (determined in the manner provided in Section 4.4.3(a) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to a Series Preferred Conversion Price pursuant to the terms of Section 4.4.4, such Series Preferred Conversion Price shall be readjusted to such Series Preferred Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to a Series Preferred Conversion Price provided for in this Section 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Section 4.4.3). If the number of shares of Common Stock issuable

upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to a Series Preferred Conversion Price that would result under the terms of this Section 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to a Series Preferred Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Series Preferred Conversion Price Upon Issuance of Additional Shares of Common Stock. In the event the Corporation shall at any time after the Series B Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Section 4.4.3), without consideration or for a consideration per share less than a Series Preferred Conversion Price in effect immediately prior to such issuance or deemed issuance, then such Series Preferred Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * (A + B) \div (A + C).$$

For purposes of the foregoing formula, the following definitions shall apply:

(a) “CP₂” shall mean the Series Preferred Conversion Price in effect immediately after such issuance or deemed issuance of Additional Shares of Common Stock

(b) “CP₁” shall mean the Series Preferred Conversion Price in effect immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock;

(c) “A” shall mean the number of shares of Common Stock outstanding immediately prior to such issuance or deemed issuance of Additional Shares of Common Stock (treating for this purpose as outstanding all shares of Common Stock issuable upon exercise of Options outstanding immediately prior to such issuance or deemed issuance or upon conversion or exchange of Convertible Securities (including the Series Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issue);

(d) “B” shall mean the number of shares of Common Stock that would have been issued if such Additional Shares of Common Stock had been issued or deemed issued at a price per share equal to CP₁ (determined by dividing the aggregate consideration received by the Corporation in respect of such issue by CP₁); and

(e) “C” shall mean the number of such Additional Shares of Common Stock issued in such transaction.

4.4.5 Determination of Consideration. For purposes of this Section 4.4, the consideration received by the Corporation for the issuance or deemed issuance of any Additional Shares of Common Stock shall be computed as follows:

(a) **Cash and Property:** Such consideration shall:

(i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;

(ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(iii) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (i) and (ii) above, as determined in good faith by the Board of Directors.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Section 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing:

(i) The total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.6 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to a Series Preferred Conversion Price pursuant to the terms of Section 4.4.4 then, upon the final such issuance, such Series Preferred Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series B Original Issue Date effect a subdivision of the outstanding Common Stock, each Series Preferred Conversion Price in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series B Original Issue Date combine the outstanding shares of Common Stock, each Series Preferred Conversion Price in effect immediately before the combination shall be proportionately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event each Series Preferred Conversion Price in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying each Series Preferred Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, each Series Preferred Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter such Series Preferred Conversion Price shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) no such adjustment shall be made if the holders of Series Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Series Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series B Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Series Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Series Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Section 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not the Series Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Sections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of Series Preferred Stock shall thereafter be convertible in lieu of the Common Stock into which it was convertible prior to such event into the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock issuable upon conversion of one share of Series Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Series Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Series Preferred Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of the Preferred Stock.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Series Preferred Conversion Price pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than 10 days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Series Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which the Series Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Series Preferred Stock (but in any event not later than 10 days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Series Preferred Conversion Price then in effect, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of Series Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Series Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock, or any Deemed Liquidation Event;
or

(c) of the voluntary or involuntary dissolution, liquidation or winding-up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Series Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Series Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding-up, and the amount per share and character of such exchange applicable to the Series Preferred Stock and the Common Stock. Such notice shall be sent at least 10 days prior to the record date or effective date for the event specified in such notice.

5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the closing of the sale of shares of Common Stock to the public in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$75,000,000 of gross proceeds to the Corporation (before deduction of underwriters' commissions and expenses) and in connection with such offering the Common Stock is listed for trading on the Nasdaq Stock Market or the New York Stock Exchange (a "**Qualified IPO**"), or (b) the date and time, or the occurrence of an event, specified by vote or written consent of the Requisite Holders (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent is referred to herein as the "**Mandatory Conversion Time**"), then (i) all outstanding shares of Series Preferred Stock shall automatically be converted into shares of Common Stock, at the then-effective conversion rate as calculated pursuant to Section 4.1.1 and (ii) such shares may not be reissued by the Corporation.

5.2 Procedural Requirements. All holders of record of shares of Series Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Series Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of Series Preferred Stock in certificated form shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, any certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to the Series Preferred Stock converted pursuant to Section 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender any certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of any certificate or certificates of such holders (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Section 5.2. As soon as practicable after the Mandatory Conversion Time and, if applicable, the surrender of any certificate or certificates (or lost certificate affidavit and agreement) for Series Preferred Stock, the Corporation shall (a) issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable on such conversion in accordance with the provisions hereof and (b) pay cash as provided in Section 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Series Preferred Stock converted. Such converted Series Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Series Preferred Stock accordingly.

6. Redemption. Other than as set forth in Section 2.3.2(b), the Series Preferred Stock is not redeemable at the option of the holder or the Corporation.

7. Redeemed or Otherwise Acquired Shares. Any shares of Series Preferred Stock that are redeemed or otherwise acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following redemption.

8. Waiver. Any of the rights, powers, preferences and other terms of the Series Preferred Stock set forth herein may be waived on behalf of all holders of Series Preferred Stock by the affirmative written consent or vote of the Requisite Holders, consenting or voting (as the case may be) as a single class and on an as-converted to Common Stock basis.

9. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Series Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

FIFTH: Subject to any additional vote required by this Certificate of Incorporation or the Bylaws of the Corporation, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

SIXTH: Subject to any additional vote required by this Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

SEVENTH: Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

EIGHTH: Meetings of stockholders may be held within or outside the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

NINTH: To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended after approval by the stockholders of this Article Ninth to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

TENTH: To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not (a) adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification or (b) increase the liability of any director of the Corporation with respect to any acts or omissions of such director, officer or agent occurring prior to, such amendment, repeal or modification.

ELEVENTH: The Corporation renounces, to the fullest extent permitted by law, any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An “**Excluded Opportunity**” is any matter, transaction or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession of (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Series Preferred Stock or any partner, member, director, stockholder, employee, affiliate or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries (collectively, the persons referred to in clauses (i) and (ii) are “**Covered Persons**”), unless such matter, transaction or interest is presented to, or acquired, created or developed by, or otherwise comes into the possession of, a Covered Person expressly and solely in such Covered Person’s capacity as a director of the Corporation.

Any repeal or modification of this Article Eleventh will only be prospective and will not affect the rights under this Article Eleventh in effect at the time of the occurrence of any actions or omissions to act giving rise to liability. Notwithstanding anything to the contrary contained elsewhere in this Certificate of Incorporation, the affirmative vote or written consent of the Requisite Holders will be required to amend or repeal, or to adopt any provisions inconsistent with this Article Eleventh.

TWELFTH: Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery in the State of Delaware shall be the sole and exclusive forum for any stockholder (including a beneficial owner) to bring (i) any derivative action or proceeding brought on behalf of the Corporation, (ii) any action asserting a claim of breach of fiduciary duty owed by any director, officer or other employee of the Corporation to the Corporation or the Corporation's stockholders, (iii) any action asserting a claim against the Corporation, its directors, officers or employees arising pursuant to any provision of the Delaware General Corporation Law or the Corporation's certificate of incorporation or bylaws or (iv) any action asserting a claim against the Corporation, its directors, officers or employees governed by the internal affairs doctrine, except for, as to each of (i) through (iv) above, any claim as to which the Court of Chancery determines that there is an indispensable party not subject to the jurisdiction of the Court of Chancery (and the indispensable party does not consent to the personal jurisdiction of the Court of Chancery within 10 days following such determination), which is vested in the exclusive jurisdiction of a court or forum other than the Court of Chancery, or for which the Court of Chancery does not have subject matter jurisdiction. If any provision or provisions of this Article Twelfth shall be held to be invalid, illegal or unenforceable as applied to any person or entity or circumstance for any reason whatsoever, then, to the fullest extent permitted by law, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of this Article Twelfth (including, without limitation, each portion of any sentence of this Article Twelfth containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) and the application of such provision to other persons or entities and circumstances shall not in any way be affected or impaired thereby.

THIRTEENTH: For purposes of Section 500 of the California Corporations Code (to the extent applicable), in connection with any repurchase of shares of Common Stock permitted under this Certificate of Incorporation from employees, officers, directors or consultants of the Corporation in connection with a termination of employment or services pursuant to agreements or arrangements approved by the Board of Directors (in addition to any other consent required under this Certificate of Incorporation), such repurchase may be made without regard to any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined in Section 500 of the California Corporations Code). Accordingly, for purposes of making any calculation under California Corporations Code Section 500 in connection with such repurchase, the amount of any "preferential dividends arrears amount" or "preferential rights amount" (as those terms are defined therein) shall be deemed to be zero.

* * *

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Certificate of Incorporation, which restates and integrates and further amends the provisions of this Corporation's Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

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This Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of the Corporation on February 19, 2021.

By: /s/ Fred Aslan, M.D.

Fred Aslan, M.D., Chief Executive Officer

**CERTIFICATE OF AMENDMENT TO
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF
ARTIVA BIOTHERAPEUTICS, INC.**

Artiva Biotherapeutics, Inc. (the “**Corporation**”), a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**General Corporation Law**”), hereby certifies that:

1. The date of filing of the original Certificate of Incorporation of this Corporation with the Secretary of State of the State of Delaware was February 14, 2019 under the name Artiva Biotherapeutics, Inc.
2. The Amended and Restated Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on February 19, 2021 (the “**Current Certificate**”).
3. The Current Certificate is hereby amended as follows:

The first paragraph of Article FOURTH of the Current Certificate is hereby amended and restated in its entirety to read as follows:

“**FOURTH:** The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 40,248,588 shares of Common Stock, \$0.0001 par value per share (“**Common Stock**”) and (ii) 27,019,554 shares of Preferred Stock, \$0.0001 par value per share (“**Preferred Stock**”).”

4. This Certificate of Amendment to the Current Certificate has been duly approved by the Board of Directors of the Corporation, acting in accordance with the provisions of Sections 141 and 242 of the General Corporation Law.
5. Thereafter, pursuant to a resolution of the Board of Directors of the Corporation, this Certificate of Amendment to the Current Certificate was submitted to the stockholders of the Corporation for their approval and was duly adopted in accordance with the provisions of Sections 228 and 242 of the General Corporation Law by the stockholders of the Corporation.

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IN WITNESS WHEREOF, ARTIVA BIOTHERAPEUTICS, INC. has caused this Certificate of Amendment to Amended and Restated Certificate of Incorporation to be executed by its duly authorized officer as of May 9, 2024.

ARTIVA BIOTHERAPEUTICS, INC.

/s/ Fred Aslan, M.D.

Fred Aslan, M.D.

Chief Executive Officer

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
ARTIVA BIOTHERAPEUTICS, INC.

Artiva Biotherapeutics, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “**DGCL**”), does hereby certify that:

ONE: The name of this corporation is Artiva Biotherapeutics, Inc. The date of filing of the original certificate of incorporation of this corporation with the Secretary of State of the State of Delaware was February 14, 2019.

TWO: This certificate of incorporation was duly adopted in accordance with the provisions of Sections 242 and 245 of the DGCL, and has been duly approved by the written consent of the stockholders of this corporation in accordance with Section 228 of the DGCL.

THREE: Pursuant to Sections 242 and 245 of the DGCL, the certificate of incorporation of this corporation, as heretofore amended, is hereby amended, integrated and restated to read in its entirety as follows:

I.

The name of this corporation is Artiva Biotherapeutics, Inc. (the “**Corporation**”).

II.

The address of the registered office of the Corporation in the State of Delaware is 838 Walker Road, Suite 21-2, City of Dover, County of Kent, Zip Code 19904, and the name of the registered agent of the Corporation in the State of Delaware at such address is Corp 2000.

III.

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware (the “**DGCL**”).

IV.

A. The Corporation is authorized to issue two classes of stock to be designated, respectively, “**Common Stock**” and “**Preferred Stock**.” The total number of shares that the Corporation is authorized to issue is 710,000,000 shares, consisting of 700,000,000 shares of Common Stock, par value \$0.0001 per share, and 10,000,000 shares of Preferred Stock, par value \$0.0001 per share.

1.

The Preferred Stock may be issued from time to time in one or more series. The Board of Directors of the Corporation (the “**Board**”) is hereby expressly authorized to provide for the issue of all or any of the unissued and undesignated shares of the Preferred Stock, in one or more series, and to fix the number of shares of such series and to determine for each such series, such voting powers, full or limited, or no voting powers, and such designation, preferences, and relative, participating, optional, or other rights and such qualifications, limitations, or restrictions thereof, as shall be set forth in a certificate of designation adopted by the Board and filed in accordance with the DGCL.

B. The number of authorized shares of Preferred Stock and Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding plus, if applicable, the number of shares of such class or series reserved for issuance) by the affirmative vote of the holders of a majority of the voting power of all of the outstanding shares of stock of the Corporation entitled to vote thereon, without a separate vote of the holders of the Preferred Stock or the Common Stock, respectively, unless a vote of any such holders is required pursuant to the terms of any certificate of designation filed with respect to any series of Preferred Stock.

Each outstanding share of Common Stock shall entitle the holder thereof to one vote on each matter properly submitted to the stockholders of the Corporation for their vote; *provided, however*, that, except as otherwise required by applicable law, holders of Common Stock shall not be entitled to vote on any amendment to this certificate of incorporation (as amended from time to time, the “**Certificate of Incorporation**”) (including any certificate of designation filed with respect to any series of Preferred Stock) that relates solely to the terms of one or more outstanding series of Preferred Stock if the holders of such affected series of Preferred Stock are entitled, either separately or together as a class with the holders of one or more other affected series of Preferred Stock, to vote thereon pursuant to applicable law or the Certificate of Incorporation (including any certificate of designation filed with respect to any series of Preferred Stock).

V.

For the management of the business and for the conduct of the affairs of the Corporation, and in further definition, limitation and regulation of the powers of the Corporation, of its directors and stockholders, or any class thereof, as the case may be, it is further provided that:

A. MANAGEMENT OF THE BUSINESS.

Except as otherwise provided by the DGCL or the Certificate of Incorporation, the business and affairs of the Corporation shall be managed by or under the direction of the Board. Subject to any rights of the holders of shares of any one or more series of Preferred Stock then outstanding to elect additional directors under specified circumstances, the number of directors that shall constitute the Board shall be fixed exclusively by the Board.

B. BOARD OF DIRECTORS.

Subject to the rights of the holders of any one or more series of Preferred Stock to elect additional directors under specified circumstances, the directors shall be divided into three classes designated as Class I, Class II and Class III, respectively. Each class shall consist, as nearly as practicable, of a number of directors equal to one third of the number of members of the Board authorized as provided in Section 5.1. The Board is authorized to assign members of the Board already in office to such classes at the time the classification becomes effective. At the first annual meeting of stockholders following the filing of the Certificate of Incorporation (the “**Filing Date**”), the initial term of office of the Class I directors shall expire and Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following the Filing Date, the initial term of office of the Class II directors shall expire and Class II directors shall be elected for a full term of three years. At the third annual meeting of stockholders following the Filing Date, the initial term of office of the Class III directors shall expire and Class III directors shall be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting.

Notwithstanding the foregoing provisions of this section, each director shall serve until such director's successor is duly elected and qualified or until such director's earlier death, resignation or removal. No decrease in the number of directors constituting the Board shall remove or shorten the term of any incumbent director.

C. REMOVAL OF DIRECTORS.

Subject to the rights of the holders of any one or more series of Preferred Stock to remove directors elected by such series of Preferred Stock, any individual director or the entire Board may be removed from office at any time, but only for cause, and only by the affirmative vote of the holders of at least 66²/₃% of the voting power of all the then-outstanding shares of the capital stock of the Corporation entitled to vote generally at an election of directors, voting together as a single class.

D. VACANCIES.

Subject to any limitations imposed by applicable law and subject to the rights of the holders of any one or more series of Preferred Stock to elect additional directors or fill vacancies in respect of such directors, any vacancies on the Board resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors, shall be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board, or by a sole remaining director, and not by the stockholders. Any director elected to fill a newly created directorship or vacancy in accordance with the preceding sentence shall hold office until the next annual meeting of stockholders held to elect the class of directors to which such director is elected and until such director's successor shall have been elected and qualified or such director's earlier death, resignation or removal.

E. PREFERRED STOCKHOLDERS ELECTION RIGHTS.

Whenever the holders of any one or more series of Preferred Stock shall have the right, voting separately as a series or separately as a class with one or more such other series, to elect directors at an annual or special meeting of stockholders, the election, term of office, removal and other features of such directorships shall be governed by the terms of the Certificate of Incorporation (including any certificate of designation relating to any series of Preferred Stock) applicable thereto. The number of directors that may be elected by the holders of any such series of Preferred Stock shall be in addition to the number fixed pursuant to Section 5.1 hereof, and the total number of directors constituting the whole Board shall be automatically adjusted accordingly. Except as otherwise provided by the Board in the resolution or resolutions establishing such series, whenever the holders of any series of Preferred Stock having such right to elect additional directors are divested of such right pursuant to the provisions of such stock, the terms of office of all such additional directors elected by the holders of such stock, or elected to fill any vacancies resulting from the death, resignation, disqualification or removal of such additional directors, shall forthwith terminate (in which case each such director thereupon shall cease to be qualified as, and shall cease to be, a director) and the total authorized number of directors of the Corporation shall automatically be reduced accordingly.

F. BYLAW AMENDMENTS.

The Board is expressly authorized and empowered to adopt, amend or repeal any provisions of the bylaws of the Corporation (as amended from time to time, the “**Bylaws**”) without the assent or vote of the stockholders in any manner not inconsistent with the laws of the State of Delaware or the Certificate of Incorporation. The stockholders shall also have power to adopt, amend or repeal the Bylaws; provided, however, that, in addition to any vote of the holders of any class or series of stock of the Corporation required by applicable law or by the Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least 66²/₃% of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote thereon, voting together as a single class.

G. STOCKHOLDER ACTIONS.

1. The directors of the Corporation need not be elected by written ballot unless the Bylaws so provide.

2. Subject to any rights of the holders of shares of any one or more series of Preferred Stock then outstanding, any action required or permitted to be taken by the stockholders of the Corporation must be effected at an annual or special meeting of the stockholders and may not be effected by consent in lieu of a meeting.

3. Subject to any rights of the holders of shares of any series of Preferred Stock then outstanding, special meetings of stockholders of the Corporation may be called only by the Chairperson of the Board, the Chief Executive Officer or the Board, but a special meeting may not be called by any other person or persons and any power of stockholders to call a special meeting of stockholders is specifically denied. Only such business shall be considered at a special meeting of stockholders as shall have been stated in the notice for such meeting.

4. An annual meeting of stockholders for the purpose of election of directors and for such other business as may properly come before the meeting, shall be held on such date, time and place, if any, as may be determined from time to time by the Board.

VI.

No director or officer of the Corporation shall be liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director or officer, except to the extent such exemption from liability or limitation thereof is not permitted under the DGCL, as the same exists or may hereafter be amended. Any amendment, modification or repeal of the foregoing sentence shall not adversely affect any right or protection of a director or officer of the Corporation hereunder in respect of any act or omission occurring prior to the time of such amendment, modification or repeal. Solely for purposes of this Section 6, “officer” shall have the meaning provided in Section 102(b)(7) of the DGCL.

VII.

A. Unless the Corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware and any appellate court therefrom shall be the sole and exclusive forum for: (A) any derivative claim or cause of action brought on behalf of the Corporation; (B) any claim or cause of action that is based upon a violation of a duty owed by any current or former director, officer, other employee or stockholder of the Corporation, to the Corporation or the Corporation’s stockholders; (C) any claim or cause of action against the Corporation or any current or former director, officer or other employee of the Corporation, arising out of or pursuant to any provision of the DGCL, the Certificate of Incorporation or the Bylaws; (D) any claim or cause of action seeking to interpret, apply, enforce or determine the validity of the Certificate of Incorporation or the Bylaws (including any right, obligation, or remedy thereunder);

(E) any claim or cause of action as to which the DGCL confers jurisdiction on the Court of Chancery of the State of Delaware; and (F) any claim or cause of action against the Corporation or any current or former director, officer or other employee of the Corporation, governed by the internal-affairs doctrine or otherwise related to the Corporation's internal affairs, in all cases to the fullest extent permitted by applicable law and subject to the court having personal jurisdiction over the indispensable parties named as defendants; provided, however, that if the designation of such court as the sole and exclusive forum for a claim or action referred to in foregoing clauses (A) through (F) of this Section would violate applicable law, then the United States District Court for the District of Delaware shall be the sole and exclusive forum for such claim or cause of action.

Unless the Corporation consents in writing to the selection of an alternative forum, to the fullest extent permitted by applicable law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended, including all causes of action asserted against any defendant named in such complaint. For the avoidance of doubt, this provision is intended to benefit and may be enforced by the Corporation, its officers and directors, the underwriters for any offering giving rise to such complaint, and any other professional entity whose profession gives authority to a statement made by that person or entity and who has prepared or certified any part of the documents underlying the offering.

VIII.

A. Any person or entity holding, owning, or otherwise acquiring any interest in any security of the Corporation shall be deemed to have notice of and consented to the provisions of the Certificate of Incorporation.

The Corporation reserves the right to amend, alter, change or repeal, at any time and from time to time, any provision contained in the Certificate of Incorporation, in the manner now or hereafter prescribed by statute, except as provided in Section 8.3, and all rights, preferences and privileges of whatsoever nature conferred upon the stockholders, directors or any other persons whomsoever by and pursuant to the Certificate of Incorporation are granted subject to this reservation.

B. Notwithstanding any other provisions of the Certificate of Incorporation or any provision of applicable law that might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote of the holders of any particular class or series of capital stock of the Corporation required by applicable law or by the Certificate of Incorporation or any certificate of designation filed with respect to a series of Preferred Stock, the affirmative vote of the holders of at least 66²/₃% of the voting power of all of the then-outstanding shares of capital stock of the Corporation entitled to vote thereon, voting together as a single class, shall be required to alter, amend or repeal (whether by merger, consolidation, conversion or otherwise), or adopt any provision inconsistent with, Sections 5, 6, 7 and this Section 8.

C. If any provision or provisions of the Certificate of Incorporation shall be held to be invalid, illegal or unenforceable as applied to any circumstance for any reason whatsoever, the validity, legality and enforceability of such provisions in any other circumstance and of the remaining provisions of the Certificate of Incorporation (including, without limitation, each portion of any paragraph of the Certificate of Incorporation containing any such provision held to be invalid, illegal or unenforceable that is not itself held to be invalid, illegal or unenforceable) shall not, to the fullest extent permitted by applicable law, in any way be affected or impaired thereby.

The Corporation has caused this certificate of incorporation to be signed by a duly authorized officer of the Corporation on [•], 2024.

ARTIVA BIOTHERAPEUTICS, INC.

By: _____
Fred Aslan, M.D.
Chief Executive Officer

6.

**BYLAWS
OF
ARTIVA BIOTHERAPEUTICS, INC.
(A DELAWARE CORPORATION)**

ARTICLE I

OFFICES

Section 1. Registered Office. The registered office of the corporation in the State of Delaware shall be 838 Walker Road, Suite 21-2, City of Dover, County of Kent, 19904 or in such other location as the Board of Directors of the corporation (the “*Board of Directors*”) may from time to time determine or the business of the corporation may require.

Section 2. Other Offices. The corporation shall also have and maintain an office or principal place of business at such place as may be fixed by the Board of Directors, and may also have offices at such other places, both within and without the State of Delaware, as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II

CORPORATE SEAL

Section 3. Corporate Seal. The Board of Directors may adopt a corporate seal. Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS’ MEETINGS

Section 4. Place of Meetings. Meetings of the stockholders of the corporation may be held at such place, either within or without the State of Delaware, as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as provided under the Delaware General Corporation Law (the “*DGCL*”).

Section 5. Annual Meeting.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may lawfully come before it, shall be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation’s notice of meeting of stockholders; (ii) by or at the direction of the Board of Directors; or (iii) by any stockholder of the corporation who was a stockholder of record at the time of giving of notice provided for in the following paragraph, who is entitled to vote at the meeting and who complied with the notice procedures set forth in this Section.

(b) At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. For nominations or other business to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of paragraph (a) of this Section, (i) the stockholder must have given timely notice thereof in writing to the Secretary of the corporation, (ii) such other business must be a proper matter for stockholder action under the DGCL and applicable law, (iii) if the stockholder, or the beneficial owner on whose behalf any such proposal or nomination is made, has provided the corporation with a Solicitation Notice (as defined in this paragraph), such stockholder or beneficial owner must, in the case of a proposal, have delivered a proxy statement and form of proxy to

holders of at least the percentage of the corporation's voting shares required under applicable law to carry any such proposal, or, in the case of a nomination or nominations, have delivered a proxy statement and form of proxy to holders of a percentage of the corporation's voting shares reasonably believed by such stockholder or beneficial owner to be sufficient to elect the nominee or nominees proposed to be nominated by such stockholder, and must, in either case, have included in such materials the Solicitation Notice, and (iv) if no Solicitation Notice relating thereto has been timely provided pursuant to this Section, the stockholder or beneficial owner proposing such business or nomination must not have solicited a number of proxies sufficient to have required the delivery of such a Solicitation Notice under this Section. To be timely, a stockholder's notice shall be delivered to the Secretary at the principal executive offices of the corporation not later than the close of business on the ninetieth (90th) day nor earlier than the close of business on the one hundred twentieth (120th) day prior to the first anniversary of the preceding year's annual meeting; *provided, however*, that in the event that the date of the annual meeting is advanced more than thirty (30) days prior to or delayed by more than thirty (30) days after the anniversary of the preceding year's annual meeting, notice by the stockholder to be timely must be so delivered not earlier than the close of business on the one hundred twentieth (120th) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90th) day prior to such annual meeting or the tenth (10th) day following the day on which public announcement of the date of such meeting is first made. In no event shall the public announcement of an adjournment of an annual meeting commence a new time period for the giving of a stockholder's notice as described above. Such stockholder's notice shall set forth: (A) as to each person whom the stockholder proposed to nominate for election or reelection as a director all information relating to such person that is required to be disclosed in solicitations of proxies for election of directors in an election contest, or is otherwise required, in each case pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "**1934 Act**"), and Rule 14a-4(d) thereunder (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected); (B) as to any other business that the stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting and any material interest in such business of such stockholder and the beneficial owner, if any, on whose behalf the proposal is made; and (C) as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (i) the name and address of such stockholder, as they appear on the corporation's books, and of such beneficial owner, (ii) the class and number of shares of the corporation that are owned beneficially and of record by such stockholder and such beneficial owner, and (iii) whether either such stockholder or beneficial owner intends to deliver a proxy statement and form of proxy to holders of, in the case of the proposal, at least the percentage of the corporation's voting shares required under applicable law to carry the proposal or, in the case of a nomination or nominations, a sufficient number of holders of the corporation's voting shares to elect such nominee or nominees (an affirmative statement of such intent, a "**Solicitation Notice**").

(c) Notwithstanding anything in the second sentence of paragraph (b) of this Section to the contrary, in the event that the number of directors to be elected to the Board of Directors of the corporation is increased and there is no public announcement naming all of the nominees for director or specifying the size of the increased Board of Directors made by the corporation at least one hundred (100) days prior to the first anniversary of the preceding year's annual meeting, a stockholder's notice required by this Section shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be delivered to the Secretary at the principal executive offices of the corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the corporation.

(d) Only such persons who are nominated in accordance with the procedures set forth in this Section (or elected or appointed pursuant to Article IV of these Bylaws) shall be eligible to serve as directors and only such business shall be conducted at a meeting of stockholders as shall have been brought before the meeting in accordance with the procedures set forth in this Section. Except as otherwise provided

by law, the Chairman of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, to declare that such defective proposal or nomination shall not be presented for stockholder action at the meeting and shall be disregarded.

(e) Notwithstanding the foregoing provisions of this Section, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholders' meeting, stockholders must provide notice as required by the regulations promulgated under the 1934 Act. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation proxy statement pursuant to Rule 14a-8 under the 1934 Act.

(f) For purposes of this Section, "public announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission (the "**SEC**") pursuant to Section 13, 14 or 15(d) of the 1934 Act.

Section 6. Special Meetings.

(a) Special meetings of the stockholders of the corporation may be called, for any purpose or purposes, by (i) the Chairman of the Board of Directors, (ii) the Chief Executive Officer, (iii) the Board of Directors pursuant to a resolution adopted by directors representing a quorum of the directors then serving on the Board of Directors or (iv) by the holders of shares entitled to cast not less than 50% of the votes at the meeting, and shall be held at such place, on such date, and at such time as the Board of Directors shall fix.

At any time or times that the corporation is subject to Section 2115(b) of the California General Corporation Law (the "**CGCL**"), stockholders holding five percent (5%) or more of the outstanding shares shall have the right to call a special meeting of stockholders as set forth in Section 18(b) of these Bylaws.

(b) If a special meeting is properly called by any person or persons other than the Board of Directors, the request shall be in writing, specifying the general nature of the business proposed to be transacted, and shall be delivered personally or sent by certified or registered mail, return receipt requested, or by telegraphic or other facsimile transmission to the Chairman of the Board of Directors, the Chief Executive Officer, or the Secretary of the corporation. No business may be transacted at such special meeting otherwise than specified in such notice. The Board of Directors shall determine the time and place of such special meeting, which shall be held not less than thirty-five (35) nor more than one hundred twenty (120) days after the date of the receipt of the request. Upon determination of the time and place of the meeting, the officer receiving the request shall cause notice to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. Nothing contained in this paragraph (b) shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board of Directors may be held.

Section 7. Notice of Meetings. Except as otherwise provided by law, notice, given in writing or by electronic transmission, of each meeting of stockholders shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting, such notice to specify the place, if any, date and hour, in the case of special meetings, the purpose or purposes of the meeting, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at any such meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. Notice of the time, place, if any, and purpose of any

meeting of stockholders may be waived in writing, signed by the person entitled to notice thereof or by electronic transmission by such person, either before or after such meeting, and will be waived by any stockholder by his or her attendance thereat in person, by remote communication, if applicable, or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting shall be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 8. Quorum. At all meetings of stockholders, except where otherwise provided by statute or by the Certificate of Incorporation, or by these Bylaws, the presence, in person, by remote communication, if applicable, or by proxy duly authorized, of the holders of a majority of the outstanding shares of stock entitled to vote shall constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairman of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business shall be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum. Except as otherwise provided by statute, or by the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the affirmative vote of a majority of shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote generally on the subject matter shall be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors shall be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy duly authorized at the meeting and entitled to vote generally on the election of directors. Where a separate vote by a class or classes or series is required, except as otherwise provided by the statute or by the Certificate of Incorporation or these Bylaws, a majority of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy duly authorized, shall constitute a quorum entitled to take action with respect to that vote on that matter. Except where otherwise provided by statute or by the Certificate of Incorporation or these Bylaws, the affirmative vote of the majority (plurality, in the case of the election of directors) of shares of such class or classes or series present in person, by remote communication, if applicable, or represented by proxy at the meeting shall be the act of such class or classes or series.

Section 9. Adjournment and Notice of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairman of the meeting or by the vote of a majority of the shares present in person, by remote communication, if applicable, or represented by proxy. When a meeting is adjourned to another time or place, if any, notice need not be given of the adjourned meeting if the time and place, if any, thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting pursuant to the Certificate of Incorporation, these Bylaws or applicable law. If the adjournment is for more than thirty (30) days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 10. Voting Rights. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders, except as otherwise provided by law, only persons in whose names shares stand on the stock records of the corporation on the record date, as provided in Section 12 of these Bylaws, shall be entitled to vote at any meeting of stockholders. Every person entitled to vote or execute consents shall have the right to do so either in person, by remote communication, if applicable, or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy shall be voted after three (3) years from its date of creation unless the proxy provides for a longer period.

Section 11. Joint Owners of Stock. If shares or other securities having voting power stand of record in the names of two (2) or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two (2) or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting (including giving consent pursuant to Section 13) shall have the following effect: (a) if only one (1) votes, his or her act binds all; (b) if more than one (1) votes and the vote is not evenly split, the act of the majority so voting binds all; (c) if more than one (1) votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in the DGCL, Section 217(b). If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of subsection (c) shall be a majority or even-split in interest.

Section 12. List of Stockholders. The Secretary shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. The list shall be open to examination of any stockholder during the time of the meeting as provided by law.

Section 13. Action Without Meeting.

(a) Unless otherwise provided in the Certificate of Incorporation, any action required by statute to be taken at any annual or special meeting of the stockholders, or any action which may be taken at any annual or special meeting of the stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent in writing, or by electronic transmission setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

(b) Every written consent or electronic transmission shall bear the date of signature of each stockholder who signs the consent, and no written consent or electronic transmission shall be effective to take the corporate action referred to therein unless, within sixty (60) days of the earliest dated consent delivered to the corporation in the manner herein required, written consents or electronic transmissions signed by a sufficient number of stockholders to take action are delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office shall be by hand or by certified or registered mail, return receipt requested.

(c) Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing or by electronic transmission and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of stockholders to take action were delivered to the corporation as provided in Section 228(c) of the DGCL. If the action to which the stockholders consented is such as would have required the filing of a certificate under any section of the DGCL if such action had been voted on by stockholders at a meeting thereof, then the certificate filed under such section shall state, in lieu of any statement required by such section concerning any vote of stockholders, that written consent has been given in accordance with Section 228 of the DGCL.

(d) An electronic mail, facsimile or other electronic transmission consenting to an action to be taken and transmitted by a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes of this Section, provided that any such electronic mail, facsimile or other electronic transmission sets forth or is delivered with information from which the corporation can determine (i) that the electronic mail, facsimile or other electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder and (ii) the date on which such stockholder or proxyholder or authorized person or persons transmitted such electronic mail, facsimile or electronic transmission. The date on which such electronic mail, facsimile or electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by electronic mail, facsimile or other electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the corporation by delivery to its registered office in the state of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by electronic mail, facsimile or other electronic transmission may be otherwise delivered to the principal place of business of the corporation or to an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded if, to the extent and in the manner provided by resolution of the Board of Directors. Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

Section 14. Organization.

(a) At every meeting of stockholders, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the Chief Executive Officer, or, if the Chief Executive Officer is absent, a chairman of the meeting chosen by a majority in interest of the stockholders entitled to vote, present in person or by proxy, shall act as chairman. The Secretary, or, in his or her absence, an Assistant Secretary directed to do so by the Chief Executive Officer, shall act as secretary of the meeting.

(b) The Board of Directors shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairman of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairman, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairman shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters which are to be voted on by ballot. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting. Unless and to the extent determined by the Board of Directors or the chairman of the meeting, meetings of stockholders shall not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV

DIRECTORS

Section 15. Number and Term of Office. The authorized number of directors of the corporation shall be fixed by the Board of Directors from time to time. Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors shall not have been elected at an annual meeting, they may be elected as soon thereafter as convenient.

Section 16. Powers. The business and affairs of the corporation shall be managed by or under the direction of the Board of Directors, except as may be otherwise provided by statute or by the Certificate of Incorporation.

Section 17. Term of Directors.

(a) Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, directors shall be elected at each annual meeting of stockholders to serve until the next annual meeting of stockholders and his or her successor is duly elected and qualified or until his or her death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

(b) No person entitled to vote at an election for directors may cumulate votes to which such person is entitled, unless, at the time of such election, the corporation is subject to Section 2115(b) of the CGCL. During such time or times that the corporation is subject to Section 2115(b) of the CGCL, every stockholder entitled to vote at an election for directors may cumulate such stockholder's votes and give one candidate a number of votes equal to the number of directors to be elected multiplied by the number of votes to which such stockholder's shares are otherwise entitled, or distribute the stockholder's votes on the same principle among as many candidates as such stockholder thinks fit. No stockholder, however, shall be entitled to so cumulate such stockholder's votes unless (i) the names of such candidate or candidates have been placed in nomination prior to the voting and (ii) the stockholder has given notice at the meeting, prior to the voting, of such stockholder's intention to cumulate such stockholder's votes. If any stockholder has given proper notice to cumulate votes, all stockholders may cumulate their votes for any candidates who have been properly placed in nomination. Under cumulative voting, the candidates receiving the highest number of votes, up to the number of directors to be elected, are elected.

Section 18. Vacancies.

(a) Unless otherwise provided in the Certificate of Incorporation, and subject to the rights of the holders of any series of Preferred Stock, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, or by a sole remaining director; *provided, however*, that whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the Certificate of Incorporation, vacancies and newly created directorships of such class or classes or series shall, unless the Board of Directors determines by resolution that any such vacancies or newly created

directorships shall be filled by stockholders, be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor shall have been elected and qualified. A vacancy in the Board of Directors shall be deemed to exist under this Bylaw in the case of the death, removal or resignation of any director.

(b) At any time or times that the corporation is subject to Section 2115(b) of the CGCL, if, after the filling of any vacancy, the directors then in office who have been elected by stockholders shall constitute less than a majority of the directors then in office, then

(i) any holder or holders of an aggregate of five percent (5%) or more of the total number of shares at the time outstanding having the right to vote for those directors may call a special meeting of stockholders; or

(ii) the Superior Court of the proper county shall, upon application of such stockholder or stockholders, summarily order a special meeting of the stockholders, to be held to elect the entire board, all in accordance with Section 305(c) of the CGCL, the term of office of any director shall terminate upon that election of a successor.

Section 19. Resignation. Any director may resign at any time by delivering his or her notice in writing or by electronic transmission to the Secretary, such resignation to specify whether it will be effective at a particular time, upon receipt by the Secretary or at the pleasure of the Board of Directors. If no such specification is made, it shall be deemed effective at the pleasure of the Board of Directors. When one or more directors shall resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office for the unexpired portion of the term of the director whose place shall be vacated and until his successor shall have been duly elected and qualified.

Section 20. Removal.

(a) Subject to any limitations imposed by applicable law, the Board of Directors or any director may be removed from office at any time (i) with cause by the affirmative vote of the holders of a majority of the voting power of all then-outstanding shares of capital stock of the corporation entitled to vote generally at an election of directors or (ii) without cause by the affirmative vote of the holders of a majority of the voting power of all then-outstanding shares of capital stock of the corporation, entitled to elect such director.

(b) During such time or times that the corporation is subject to Section 2115(b) of the CGCL, the Board of Directors or any individual director may be removed from office at any time without cause by the affirmative vote of the holders of a majority of the outstanding shares entitled to vote on such removal; *provided, however*, that unless the entire Board of Directors is removed, no individual director may be removed when the votes cast against such director's removal, or not consenting in writing to such removal, would be sufficient to elect that director if voted cumulatively at an election in which the same total number of votes were cast (or, if such action is taken by written consent, all shares entitled to vote were voted) and the entire number of directors authorized at the time of such director's most recent election were then being elected.

Section 21. Meetings

(a) Regular Meetings. Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware which has been designated by the Board of Directors and publicized among all directors, either orally or in writing, including a voice-messaging system or other system designated to record and communicate messages, facsimile, or by electronic mail or other electronic means. No further notice shall be required for a regular meeting of the Board of Directors.

(b) Special Meetings. Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chairman of the Board of Directors, the Chief Executive Officer (if a director), the President (if a director) or any director.

(c) Meetings by Electronic Communications Equipment. Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.

(d) Notice of Special Meetings. Notice of the time and place of all special meetings of the Board of Directors shall be orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means, during normal business hours, at least twenty-four (24) hours before the date and time of the meeting. If notice is sent by US mail, it shall be sent by first class mail, postage prepaid at least three (3) days before the date of the meeting. Notice of any meeting may be waived in writing or by electronic transmission at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

(e) Waiver of Notice. The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, shall be as valid as though had at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present who did not receive notice shall sign a written waiver of notice or shall waive notice by electronic transmission. All such waivers shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 22. Quorum and Voting.

(a) Unless the Certificate of Incorporation requires a greater number, a quorum of the Board of Directors shall consist of a majority of the total number of directors then serving; *provided, however*, that such number shall never be less than one-third (1/3) of the total number of directors authorized except that when one director is authorized, then one director shall constitute a quorum. At any meeting, whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting. If the Certificate of Incorporation provides that one or more directors shall have more or less than one vote per director on any matter, every reference in this Section to a majority or other proportion of the directors shall refer to a majority or other proportion of the votes of the directors.

(b) At each meeting of the Board of Directors at which a quorum is present, all questions and business shall be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by law, the Certificate of Incorporation or these Bylaws.

Section 23. Action Without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing or writings or transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 24. Fees and Compensation. Directors shall be entitled to such compensation for their services as may be approved by the Board of Directors, including, if so approved, by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors. Nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

Section 25. Committees.

(a) **Executive Committee.** The Board of Directors may appoint an Executive Committee to consist of one (1) or more members of the Board of Directors. The Executive Committee, to the extent permitted by law and provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any bylaw of the corporation.

(b) **Other Committees.** The Board of Directors may, from time to time, appoint such other committees as may be permitted by law. Such other committees appointed by the Board of Directors shall consist of one (1) or more members of the Board of Directors and shall have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event shall any such committee have the powers denied to the Executive Committee in these Bylaws.

(c) **Term.** The Board of Directors, subject to any requirements of any outstanding series of Preferred Stock and the provisions of paragraphs (a) or (b) of this Section may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member shall terminate on the date of his or her death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

(d) Meetings. Unless the Board of Directors shall otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section shall be held at such times and places as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at any place which has been determined from time to time by such committee, and may be called by any director who is a member of such committee, upon notice to the members of such committee of the time and place of such special meeting given in the manner provided for the giving of notice to members of the Board of Directors of the time and place of special meetings of the Board of Directors. Notice of any special meeting of any committee may be waived in writing at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends such special meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Unless otherwise provided by the Board of Directors in the resolutions authorizing the creation of the committee, a majority of the authorized number of members of any such committee shall constitute a quorum for the transaction of business, and the act of a majority of those present at any meeting at which a quorum is present shall be the act of such committee.

Section 26. Organization. At every meeting of the directors, the Chairman of the Board of Directors, or, if a Chairman has not been appointed or is absent, the Chief Executive Officer (if a director), or if the Chief Executive Officer is not a director or is absent, the President (if a director), or if the President is not a director or is absent, the most senior Vice President (if a director) or, in the absence of any such person, a chairman of the meeting chosen by a majority of the directors present, shall preside over the meeting. The Secretary, or in his or her absence, any Assistant Secretary directed to do so by the Chief Executive Officer or President, shall act as secretary of the meeting.

ARTICLE V

OFFICERS

Section 27. Officers Designated. The officers of the corporation shall include, if and when designated by the Board of Directors, the Chief Executive Officer, the President, one or more Vice Presidents, the Secretary, the Chief Financial Officer, the Treasurer and the Controller, all of whom shall be elected or appointed from time to time by the Board of Directors. The Board of Directors may also appoint one or more Assistant Secretaries, Assistant Treasurers, Assistant Controllers and such other officers and agents with such powers and duties as it shall deem necessary. The Board of Directors may assign such additional titles to one or more of the officers as it shall deem appropriate. Any one person may hold any number of offices of the corporation at any one time unless specifically prohibited therefrom by law. The salaries and other compensation of the officers of the corporation shall be fixed by or in the manner designated by the Board of Directors.

Section 28. Tenure and Duties of Officers.

(a) General. All officers shall hold office at the pleasure of the Board of Directors and until their successors shall have been duly elected or appointed and qualified, unless sooner removed. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors, or by the Chief Executive Officer or other officer if so authorized by the Board of Directors.

(b) Duties of Chairman of the Board of Directors. The Chairman of the Board of Directors, when present, shall preside at all meetings of the stockholders and the Board of Directors. The Chairman of the Board of Directors shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time. If there is no Chief Executive Officer and no President, then the Chairman of the Board of Directors shall also serve as the Chief Executive Officer of the corporation and shall have the powers and duties prescribed in paragraph (c) of this Section.

(c) Duties of Chief Executive Officer. The Chief Executive Officer shall preside at all meetings of the stockholders and (if a director) at all meetings of the Board of Directors, unless the Chairman of the Board of Directors has been appointed and is present. The Chief Executive Officer shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The Chief Executive Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time.

(d) Duties of President. In the absence or disability of the Chief Executive Officer or if the office of Chief Executive Officer is vacant, the President shall preside at all meetings of the stockholders and (if a director) at all meetings of the Board of Directors, unless the Chairman of the Board of Directors has been appointed and is present. If the office of Chief Executive Officer is vacant, the President shall be the chief executive officer of the corporation (including for purposes of any reference to Chief Executive Officer in these Bylaws) and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The President shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time.

(e) Duties of Vice Presidents. The Vice Presidents may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant. The Vice Presidents shall perform other duties commonly incident to their office and shall also perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

(f) Duties of Secretary. The Secretary shall attend all meetings of the stockholders and of the Board of Directors and shall record all acts and proceedings thereof in the minute book of the corporation. The Secretary shall give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary shall perform all other duties provided for in these Bylaws and other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors shall designate from time to time. The Chief Executive Officer may direct any Assistant Secretary to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer shall designate from time to time.

(g) Duties of Chief Financial Officer. The Chief Financial Officer shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the Chief Executive Officer. The Chief Financial Officer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Chief Financial Officer shall perform other duties commonly incident to his or her office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer shall designate from time to time. The Chief Executive Officer may direct the Treasurer or any Assistant Treasurer, or the Controller or any Assistant Controller to assume and perform the duties of the Chief Financial Officer in

the absence or disability of the Chief Financial Officer, and each Treasurer and Assistant Treasurer and each Controller and Assistant Controller shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer shall designate from time to time.

Section 29. Delegation of Authority. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

Section 30. Resignations. Any officer may resign at any time by giving notice in writing or by electronic transmission notice to the Board of Directors or to the Chief Executive Officer or to the President or to the Secretary. Any such resignation shall be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation shall become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.

Section 31. Removal. Any officer may be removed from office at any time, either with or without cause, by the affirmative vote of a majority of the directors in office at the time, or by the unanimous written or electronic consent of the directors in office at the time, or by any committee or superior officers upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 32. Execution of Corporate Instruments. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name, or to enter into contracts on behalf of the corporation, except where otherwise provided by law or these Bylaws, and such execution or signature shall be binding upon the corporation. All checks and drafts drawn on banks or other depositories of funds to the credit of the corporation or on special accounts of the corporation shall be signed by such person or persons as the Board of Directors shall authorize so to do. Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 33. Voting of Securities Owned by the Corporation. All stock and other securities of other corporations owned or held by the corporation for itself, or for other parties in any capacity, shall be voted, and all proxies with respect thereto shall be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII

SHARES OF STOCK

Section 34. Form and Execution of Certificates. The shares of the corporation shall be represented by certificates, or shall be uncertificated. Certificates for the shares of stock, if any, of the corporation shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of shares of stock in the corporation represented by certificate shall be entitled to have a certificate signed by or in the name of the corporation by any two authorized officers of the corporation, including but not limited to the Chief Executive Officer, the President, the Chief Financial Officer, any Vice President, the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by him or her in the corporation. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he or she were such officer, transfer agent, or registrar at the date of issue.

Section 35. Lost Certificates. A new certificate or certificates shall be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner's legal representative, to agree to indemnify the corporation in such manner as it shall require or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

Section 36. Restrictions on Transfer.

(a) No holder of any of the shares of stock of the corporation may sell, transfer, assign, pledge, or otherwise dispose of or encumber any of the shares of stock of the corporation or any right or interest therein, whether voluntarily or by operation of law, or by gift or otherwise (each, a "**Transfer**") without the prior written consent of the corporation, upon duly authorized action of its Board of Directors. The corporation may withhold consent for any legitimate corporate purpose, as determined by the Board of Directors. Examples of the basis for the corporation to withhold its consent include, without limitation, (i) if such Transfer to individuals, companies or any other form of entity identified by the corporation as a potential competitor or considered by the corporation to be unfriendly; or (ii) if such Transfer increases the risk of the corporation having a class of security held of record by two thousand (2,000) or more persons, or five hundred (500) or more persons who are not accredited investors (as such term is defined by the SEC), as described in Section 12(g) of the 1934 Act and any related regulations, or otherwise requiring the corporation to register any class of securities under the 1934 Act; or (iii) if such Transfer would result in the loss of any federal or state securities law exemption relied upon by the corporation in connection with the initial issuance of such shares or the issuance of any other securities; or (iv) if such Transfer is facilitated in any manner by any public posting, message board, trading portal, internet site, or similar method of communication, including without limitation any trading portal or internet site intended to facilitate secondary transfers of securities; or (v) if such Transfer is to be effected in a brokered transaction; or (vi) if such Transfer represents a Transfer of less than all of the shares then held by the stockholder and its affiliates or is to be made to more than a single transferee.

(b) If a stockholder desires to Transfer any shares, then the stockholder shall first give written notice thereof to the corporation. The notice shall name the proposed transferee and state the number of shares to be transferred, the proposed consideration, and all other terms and conditions of the proposed transfer. Any shares proposed to be transferred to which Transfer the corporation has consented pursuant to paragraph (a) of this Section will first be subject to the corporation's right of first refusal located in Section 46 of these Bylaws.

(c) Any Transfer, or purported Transfer, of shares not made in strict compliance with this Section shall be null and void, shall not be recorded on the books of the corporation and shall not be recognized by the corporation.

(d) The foregoing restriction on Transfer shall terminate upon the date securities of the corporation are first offered to the public pursuant to a registration statement filed with, and declared effective by, the SEC under the Securities Act of 1933, as amended (the “1933 Act”).

(e) The certificates representing shares of stock of the corporation shall bear on their face the following legend so long as the foregoing Transfer restrictions are in effect:

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A TRANSFER RESTRICTION, AS PROVIDED IN THE BYLAWS OF THE CORPORATION.”

Section 37. Fixing Record Dates.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, subject to applicable law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day immediately preceding the day on which notice is given, or if notice is waived, at the close of business on the day immediately preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; *provided, however*, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the corporation may determine the stockholders entitled to consent to corporate action in writing without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date shall not be more than ten (10) days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. Any stockholder of record seeking to have the stockholders authorize or take corporate action by written consent shall, by written notice to the Secretary, request the Board of Directors to fix a record date. The Board of Directors shall promptly, but in all events within ten (10) days after the date on which such a request is received, adopt a resolution fixing the record date. If no record date has been fixed by the Board of Directors within ten (10) days of the date on which such a request is received, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting, when no prior action by the Board of Directors is required by applicable law, shall be the first date on which a signed written consent setting forth the action taken or proposed to be taken is delivered to the corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to the corporation’s registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by law, the record date for determining stockholders entitled to consent to corporate action in writing without a meeting shall be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.

(c) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty (60) days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 38. Registered Stockholders. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 39. Execution of Other Securities. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Section 34 of these Bylaws), may be signed by the Chairman of the Board of Directors, the Chief Executive Officer, the President or any Vice President, or such other person as may be authorized by the Board of Directors, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Chief Financial Officer or Treasurer or an Assistant Treasurer; *provided, however*, that where any such bond, debenture or other corporate security shall be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by the Treasurer or an Assistant Treasurer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who shall have signed or attested any bond, debenture or other corporate security, or whose facsimile signature shall appear thereon or on any such interest coupon, shall have ceased to be such officer before the bond, debenture or other corporate security so signed or attested shall have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature shall have been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX

DIVIDENDS

Section 40. Declaration of Dividends. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors pursuant to law at any regular or special meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 41. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the Board of Directors shall think conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

Section 42. Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

ARTICLE XI

INDEMNIFICATION

Section 43. Indemnification of Directors, Executive Officers, Employees and Other Agents.

(a) Directors and Executive Officers. The corporation shall indemnify its directors and executive officers (for the purposes of this Article, “executive officers” shall have the meaning defined in Rule 3b-7 promulgated under the 1934 Act) to the fullest extent not prohibited by the DGCL or any other applicable law; *provided, however*, that the corporation may modify the extent of such indemnification by individual contracts with its directors and executive officers; and, *provided, further*, that the corporation shall not be required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the DGCL or any other applicable law or (iv) such indemnification is required to be made under paragraph (d) of this Section.

(b) Other Officers, Employees and Other Agents. The corporation shall have power to indemnify its other officers, employees and other agents as set forth in the DGCL or any other applicable law. The Board of Directors shall have the power to delegate the determination of whether indemnification shall be given to any such person except executive officers to such officers or other persons as the Board of Directors shall determine.

(c) Expenses. The corporation shall advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such person is or was a director or executive officer of the corporation, or is or was serving at the request of the corporation as a director or executive officer of another corporation, partnership, joint venture, trust or other enterprise, prior to the final disposition of the proceeding, promptly following request therefor, all expenses incurred by any director or executive officer in connection with such proceeding; *provided, however*, that, if the DGCL requires, an advancement of expenses incurred by a director or officer in his or her capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the corporation of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified for such expenses under this Section or otherwise.

Notwithstanding the foregoing, unless otherwise determined pursuant to paragraph (e) of this Section, no advance shall be made by the corporation to an executive officer of the corporation (except by reason of the fact that such executive officer is or was a director of the corporation, in which event this paragraph shall not apply) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, if a determination is reasonably and promptly made (i) by a majority vote of a quorum consisting of directors who were not parties to the proceeding, even if not a quorum, or (ii) by a committee of such directors designated by a majority of such directors, even though less than a quorum, or (iii) if there are no such directors, or such directors so direct, by independent legal counsel in a written opinion, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation.

(d) Enforcement. Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and executive officers under this Section shall be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the corporation and the director or executive officer. Any right to indemnification or advances granted by this Section to a director or executive officer or officer shall be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within ninety (90) days of request therefor. The claimant in such enforcement action, if successful in whole or in part, shall be entitled to be paid also the expense of prosecuting the claim. In connection with any claim for indemnification, the corporation shall be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the DGCL or any other applicable law for the corporation to indemnify the claimant for the amount claimed. In connection with any claim by an executive officer of the corporation (except in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such executive officer is or was a director of the corporation) for advances, the corporation shall be entitled to raise as a defense as to any such action clear and convincing evidence that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation, or with respect to any criminal action or proceeding that such person acted without reasonable cause to believe that his or her conduct was lawful. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he has met the applicable standard of conduct set forth in the DGCL or any other applicable law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct.

(e) Non-Exclusivity of Rights. The rights conferred on any person by this Section shall not be exclusive of any other right which such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his or her official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL or any other applicable law.

(f) Survival of Rights. The rights conferred on any person by this Section shall continue as to a person who has ceased to be a director or executive officer and shall inure to the benefit of the heirs, executors and administrators of such a person.

(g) Insurance. To the fullest extent permitted by the DGCL, or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this Section.

(h) Amendments. Any repeal or modification of this Section shall only be prospective and shall not affect the rights under this Bylaw in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any agent of the corporation.

(i) Saving Clause. If this Section or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the corporation shall nevertheless indemnify each director and executive officer to the full extent not prohibited by any applicable portion of this Bylaw that shall not have been invalidated, or by any other applicable law. If this Section shall be invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation shall indemnify each director and executive officer to the full extent under applicable law.

(j) Certain Definitions. For the purposes of this Section, the following definitions shall apply:

(1) The term “proceeding” shall be broadly construed and shall include, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.

(2) The term “expenses” shall be broadly construed and shall include, without limitation, court costs, attorneys’ fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.

(3) The term the “corporation” shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Section with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(4) References to a “director,” “executive officer,” “officer,” “employee,” or “agent” of the corporation shall include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, executive officer, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.

(5) References to “other enterprises” shall include employee benefit plans; references to “fines” shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to “serving at the request of the corporation” shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner “not opposed to the best interests of the corporation” as referred to in this Section.

ARTICLE XII

NOTICES

Section 44. Notices.

(a) Notice to Stockholders. Written notice to stockholders of stockholder meetings shall be given as provided in Section 7 of these Bylaws. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by law, written notice to stockholders for purposes other than stockholder meetings may be sent by United States mail or nationally recognized overnight courier, or by facsimile, telegraph or telex or by electronic mail or other electronic means.

(b) Notice to Directors. Any notice required to be given to any director may be given by the method stated in paragraph (a) of this Section, or as provided for in Section 21 of these Bylaws. If such notice is not delivered personally, it shall be sent to such address as such director shall have filed in writing with the Secretary, or, in the absence of such filing, to the last known post office address of such director.

(c) Affidavit of Mailing. An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) Methods of Notice. It shall not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(e) Notice to Person with Whom Communication Is Unlawful. Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(f) Notice to Stockholders Sharing an Address. Except as otherwise prohibited under DGCL, any notice given under the provisions of DGCL, the Certificate of Incorporation or the Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent shall have been deemed to have been given if such stockholder fails to object in writing to the corporation within 60 days of having been given notice by the corporation of its intention to send the single notice. Any consent shall be revocable by the stockholder by written notice to the corporation.

ARTICLE XIII

AMENDMENTS

Section 45. Amendments. The Board of Directors is expressly empowered to adopt, amend or repeal Bylaws of the corporation. The stockholders shall also have power to adopt, amend or repeal the Bylaws of the corporation; *provided, however*, that, in addition to any vote of the holders of any class or series of stock of the corporation required by law or by the Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of a majority of the voting power of all of the then-outstanding shares of the capital stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

ARTICLE XIV

RIGHT OF FIRST REFUSAL

Section 46. Right of First Refusal. No stockholder shall Transfer any of the shares of stock of the corporation, except by a Transfer which meets the requirements set forth in Section 36 and below:

(a) If the stockholder desires to Transfer any of such shareholder's shares of stock, then the stockholder shall first give the notice specified in Section 36(b) of these Bylaws and comply with the provisions therein.

(b) For thirty (30) days following receipt of such notice, the corporation shall have the option to purchase of the shares specified in the notice at the price and upon the terms set forth in such notice; *provided, however*, that, with the consent of the stockholder, the corporation shall have the option to purchase a lesser portion of the shares specified in said notice at the price and upon the terms set forth therein. In the event of a gift, property settlement or other Transfer in which the proposed transferee is not paying the full price for the shares, and that is not otherwise exempted from the provisions of this Section, the price shall be deemed to be the fair market value of the stock at such time as determined in good faith by the Board of Directors. In the event the corporation elects to purchase all of the shares or, with consent of the stockholder, a lesser portion of the shares, it shall give written notice to the transferring stockholder of its election and settlement for said shares shall be made as provided below in paragraph (d) of this Section.

(c) The corporation may assign its rights hereunder.

(d) In the event the corporation and/or its assignee(s) elect to acquire any of the shares of the transferring stockholder as specified in said transferring stockholder's notice, the Secretary of the corporation shall so notify the transferring stockholder and settlement thereof shall be made in cash within thirty (30) days after the Secretary of the corporation receives said transferring stockholder's notice; provided that if the terms of payment set forth in said transferring stockholder's notice were other than cash against delivery, the corporation and/or its assignee(s) shall pay for said shares on the same terms and conditions set forth in said transferring stockholder's notice.

(e) In the event the corporation and/or its assignees(s) do not elect to acquire all of the shares specified in the transferring stockholder's notice, said transferring stockholder may, subject to the corporation's approval and all other restrictions on Transfer located in Section 36 of these Bylaws, within the sixty-day period following the expiration or waiver of the option rights granted to the corporation and/or its assignees(s) herein, Transfer the shares specified in said transferring stockholder's notice which were not acquired by the corporation and/or its assignees(s) as specified in said transferring stockholder's notice. All shares so sold by said transferring stockholder shall continue to be subject to the provisions of this bylaw in the same manner as before said Transfer.

(f) Anything to the contrary contained herein notwithstanding, the following transactions shall be exempt from the right of first refusal in paragraph (a) of this Section:

(1) A stockholder's Transfer of any or all shares held either during such stockholder's lifetime or on death by will or intestacy to such stockholder's immediate family or to any custodian or trustee for the account of such stockholder or such stockholder's immediate family or to any limited partnership or limited liability company of which the stockholder, members of such stockholder's immediate family or any trust for the account of such stockholder or such stockholder's immediate family will be the general or limited partner(s) of such partnership or the controlling member(s) of such limited liability company. "Immediate family" as used herein shall mean spouse, lineal descendant, father, mother, brother, or sister of the stockholder making such Transfer;

(2) A stockholder's bona fide pledge or mortgage of any shares with a commercial lending institution, provided that any subsequent Transfer of said shares by said institution shall be conducted in the manner set forth in this bylaw;

(3) A stockholder's Transfer of any or all of such stockholder's shares to the corporation or to any other stockholder of the corporation;

(4) A stockholder's Transfer of any or all of such stockholder's shares to a person who, at the time of such Transfer, is an officer or director of the corporation;

(5) A corporate stockholder's Transfer of any or all of its shares pursuant to and in accordance with the terms of any merger, consolidation, reclassification of shares or capital reorganization of the corporate stockholder, or pursuant to a sale of all or substantially all of the stock or assets of a corporate stockholder;

(6) A corporate stockholder's Transfer of any or all of its shares to any or all of its stockholders; or

(7) A Transfer by a stockholder which is a limited or general partnership to any or all of its partners or former partners in accordance with partnership interests.

In any such case, the transferee, assignee, or other recipient shall receive and hold such stock subject to the provisions of this Section and the transfer restrictions in Section 36, and there shall be no further Transfer of such stock except in accord with this Section and the transfer restrictions in Section 36.

(g) The provisions of this bylaw may be waived with respect to any Transfer either by the corporation, upon duly authorized action of its Board of Directors, or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation (excluding the votes represented by those shares to be transferred by the transferring stockholder). This bylaw may be amended or repealed either by a duly authorized action of the Board of Directors or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation.

(h) Any Transfer, or purported Transfer, of securities of the corporation shall be null and void unless the terms, conditions, and provisions of this bylaw are strictly observed and followed.

(i) The foregoing right of first refusal shall terminate upon the date securities of the corporation are first offered to the public pursuant to a registration statement filed with, and declared effective by, the SEC under the Securities Act of 1933, as amended.

(j) The certificates representing shares of stock of the corporation shall bear on their face the following legend so long as the foregoing right of first refusal remains in effect:

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A RIGHT OF FIRST REFUSAL OPTION IN FAVOR OF THE CORPORATION AND/OR ITS ASSIGNEE(S), AS PROVIDED IN THE BYLAWS OF THE CORPORATION.”

(k) To the extent this Section conflicts with any written agreements between the Company and the stockholder attempting to Transfer shares, such agreement shall control.

ARTICLE XV

LOANS TO OFFICERS

Section 47. Loans to Officers. Except as otherwise prohibited under applicable law, the corporation may lend money to, or guarantee any obligation of, or otherwise assist any officer or other employee of the corporation or of its subsidiaries, including any officer or employee who is a Director of the corporation or its subsidiaries, whenever, in the judgment of the Board of Directors, such loan, guarantee or assistance may reasonably be expected to benefit the corporation. The loan, guarantee or other assistance may be with or without interest and may be unsecured, or secured in such manner as the Board of Directors shall approve, including, without limitation, a pledge of shares of stock of the corporation. Nothing in these Bylaws shall be deemed to deny, limit or restrict the powers of guaranty or warranty of the corporation at common law or under any statute.

ARTICLE XVI

MISCELLANEOUS

Section 48. Annual Report.

(a) Subject to the provisions of paragraph (b) of this Section, during such time or times that the corporation is subject to Section 1501 of the CGCL, the Board of Directors shall cause an annual report to be sent to each stockholder of the corporation not later than one hundred twenty (120) days after the close of the corporation's fiscal year. Such report shall include a balance sheet as of the end of such fiscal year and an income statement and statement of changes in financial position for such fiscal year, accompanied by any report thereon of independent accountants or, if there is no such report, the certificate of an authorized officer of the corporation that such statements were prepared without audit from the books and records of the corporation. When there are more than 100 stockholders of record of the corporation's shares, as determined by Section 605 of the CGCL, additional information as required by Section 1501(b) of the CGCL shall also be contained in such report, provided that if the corporation has a class of securities registered under Section 12 of the 1934 Act, the 1934 Act shall take precedence. Such report shall be sent to stockholders at least fifteen (15) days prior to the next annual meeting of stockholders after the end of the fiscal year to which it relates.

(b) If and so long as there are fewer than one hundred (100) holders of record of the corporation's shares, the requirement of sending of an annual report to the stockholders of the corporation is hereby expressly waived.

Section 49. Forum. Unless the corporation consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the corporation; (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the corporation to the corporation or the corporation's stockholders; (iii) any action asserting a claim against the corporation or any director or officer or other employee of the corporation arising pursuant to any provision of the DGCL, the certificate of incorporation or the Bylaws of the corporation; or (iv) any action asserting a claim against the corporation or any director or officer or other employee of the corporation governed by the internal affairs doctrine.

**FIRST AMENDMENT TO
BYLAWS
OF
ARTIVA BIOTHERAPEUTICS, INC.**

The undersigned, being the Secretary of **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation, does hereby certify that the Bylaws of this corporation was amended, effective June 25, 2020, as follows:

1. Section 36 shall be amended and restated in its entirety as follows:

Section 36. Restrictions on Transfer.

(a) No holder of any of the shares of stock of the corporation may sell, transfer, assign, pledge, or otherwise dispose of or encumber any of the shares of stock of the corporation or any right or interest therein, whether voluntarily or by operation of law, or by gift or otherwise (including by way of any arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such stock) (each, a “*Transfer*”) without the prior written consent of the corporation, upon duly authorized action of its Board of Directors (including a vote of the majority of the disinterested directors). The corporation may withhold consent for any legitimate corporate purpose, as determined by the Board of Directors. Examples of the basis for the corporation to withhold its consent include, without limitation, (i) if such Transfer to individuals, companies or any other form of entity identified by the corporation as a potential competitor or considered by the corporation to be unfriendly; or (ii) if such Transfer increases the risk of the corporation having a class of security held of record by two thousand (2,000) or more persons, or five hundred (500) or more persons who are not accredited investors (as such term is defined by the SEC), as described in Section 12(g) of the 1934 Act and any related regulations, or otherwise requiring the corporation to register any class of securities under the 1934 Act; or (iii) if such Transfer would result in the loss of any federal or state securities law exemption relied upon by the corporation in connection with the initial issuance of such shares or the issuance of any other securities; or (iv) if such Transfer is facilitated in any manner by any public posting, message board, trading portal, internet site, or similar method of communication, including without limitation any trading portal or internet site intended to facilitate secondary transfers of securities; or (v) if such Transfer is to be effected in a brokered transaction; or (vi) if such Transfer represents a Transfer of less than all of the shares then held by the stockholder and its affiliates or is to be made to more than a single transferee.

(b) If a stockholder desires to Transfer any shares, then the stockholder shall first give written notice thereof to the corporation. The notice shall name the proposed transferee and state the number of shares to be transferred, the proposed consideration, and all other terms and conditions of the proposed Transfer.

(c) At the option of the corporation, the stockholder shall be obligated to pay to the corporation a reasonable fee related to the costs and time of the corporation and its legal and other advisors related to any proposed Transfer.

(d) Any Transfer, or purported Transfer, of shares not made in strict compliance with this Section shall be null and void, shall not be recorded on the books of the corporation and shall not be recognized by the corporation. Transfers of record of shares of stock of the corporation will be made only upon its books by the holders thereof, in person or by attorney duly authorized, and, in the case of stock represented by certificate, upon the surrender of a certificate or certificate for a like number of shares, properly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer.

(e) The restrictions on Transfer set forth in this Section 36 shall not apply to:

(1) A stockholder's Transfer of shares of Preferred Stock of the corporation (the "***Preferred Stock***"), or any shares of common stock issued upon conversion thereof; and

(2) A stockholder's Transfer of any or all shares held either during such stockholder's lifetime or on death by will or intestacy to such stockholder's immediate family or to any custodian or trustee for the account of such stockholder or such stockholder's immediate family or to any limited partnership or limited liability company of which the stockholder, members of such stockholder's immediate family or any trust for the account of such stockholder or such stockholder's immediate family will be the general or limited partner(s) of such partnership or the controlling member(s) of such limited liability company. "Immediate family" shall mean spouse, lineal descendant, father, mother, brother, or sister of the stockholder making such Transfer.

(f) The foregoing restriction on Transfer shall terminate upon the date securities of the corporation are first offered to the public pursuant to a registration statement filed with, and declared effective by, the SEC under the Securities Act of 1933, as amended (the "***1933 Act***").

(g) The certificates representing shares of common stock of the corporation (other than common stock issued upon the conversion of Preferred Stock) shall bear on their face the following legend so long as the foregoing Transfer restrictions are in effect:

"THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A TRANSFER RESTRICTION, AS PROVIDED IN THE BYLAWS OF THE CORPORATION."

2. Section 46 shall be amended and restated in its entirety as follows:

Section 46. Right of First Refusal. No stockholder shall Transfer any of the shares of Common Stock of the corporation, except by a Transfer which meets the requirements set forth in Section 36 and below:

(a) If the stockholder desires to Transfer any of such shareholder's shares of stock, then the stockholder shall first give the notice specified in Section 36(b) of these Bylaws and comply with the provisions therein.

(b) For thirty (30) days following receipt of such notice, the corporation shall have the option to purchase of the shares specified in the notice at the price and upon the terms set forth in such notice; *provided, however*, that, with the consent of the stockholder, the corporation shall have the option to purchase a lesser portion of the shares specified in said notice at the price and upon the terms set forth therein. In the event of a gift, property settlement or other Transfer in which the proposed transferee is not paying the full price for the shares, and that is not otherwise exempted from the provisions of this Section, the price shall be deemed to be the fair market value of the stock at such time as determined in good faith by the Board of Directors. In the event the corporation elects to purchase all of the shares or, with consent of the stockholder, a lesser portion of the shares, it shall give written notice to the transferring stockholder of its election and settlement for said shares shall be made as provided below in paragraph (d) of this Section.

(c) The corporation may assign its rights hereunder.

(d) In the event the corporation and/or its assignee(s) elect to acquire any of the shares of the transferring stockholder as specified in said transferring stockholder's notice, the Secretary of the corporation shall so notify the transferring stockholder and settlement thereof shall be made in cash within thirty (30) days after the Secretary of the corporation receives said transferring stockholder's notice; provided that if the terms of payment set forth in said transferring stockholder's notice were other than cash against delivery, the corporation and/or its assignee(s) shall pay for said shares on the same terms and conditions set forth in said transferring stockholder's notice.

(e) In the event the corporation and/or its assignees(s) do not elect to acquire all of the shares specified in the transferring stockholder's notice, said transferring stockholder may, subject to the corporation's approval and all other restrictions on Transfer located in Section 36 of these Bylaws, within the sixty-day period following the expiration or waiver of the option rights granted to the corporation and/or its assignees(s) herein, Transfer the shares specified in said transferring stockholder's notice which were not acquired by the corporation and/or its assignees(s) as specified in said transferring stockholder's notice. All shares so sold by said transferring stockholder shall continue to be subject to the provisions of this bylaw in the same manner as before said Transfer.

(f) Anything to the contrary contained herein notwithstanding, the following transactions shall be exempt from the right of first refusal in this Section 46:

(1) A stockholder's Transfer of any or all shares held either during such stockholder's lifetime or on death by will or intestacy to such stockholder's immediate family or to any custodian or trustee for the account of such stockholder or such stockholder's immediate family or to any limited partnership or limited liability company of which the stockholder, members of such stockholder's immediate family or any trust for the account of such stockholder or such stockholder's immediate family will be the general or limited partner(s) of such partnership or the controlling member(s) of such limited liability company;

(2) A stockholder's bona fide pledge or mortgage of any shares with a commercial lending institution, provided that any subsequent Transfer of said shares by said institution shall be conducted in the manner set forth in this bylaw;

(3) A stockholder's Transfer of any or all of such stockholder's shares to the corporation or to any other stockholder of the corporation, including, without limitation, pursuant to that certain right of first refusal and co-sale agreement by and among the corporation and certain of its stockholders, as may be amended from time to time;

(4) A stockholder's Transfer of any or all of such stockholder's shares to a person who, at the time of such Transfer, is an officer or director of the corporation;

(5) A corporate stockholder's Transfer of any or all of its shares pursuant to and in accordance with the terms of any merger, consolidation, reclassification of shares or capital reorganization of the corporate stockholder, or pursuant to a sale of all or substantially all of the stock or assets of a corporate stockholder;

(6) A corporate stockholder's Transfer of any or all of its shares to any or all of its stockholders;

(7) A Transfer by a stockholder which is a limited or general partnership to any or all of its partners or former partners in accordance with partnership interests; or

(8) A stockholder's Transfer of shares Preferred Stock, or any shares of common stock issued upon conversion thereof.

In any such case, the transferee, assignee, or other recipient shall receive and hold such stock subject to the provisions of this Section and the transfer restrictions in Section 36, and there shall be no further Transfer of such stock except in accordance with this Section and the transfer restrictions in Section 36.

(g) The provisions of this bylaw may be waived with respect to any Transfer either by the corporation, upon duly authorized action of its Board of Directors, or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation (excluding the votes represented by those shares to be transferred by the transferring stockholder). This bylaw may be amended or repealed either by a duly authorized action of the Board of Directors or by the stockholders, upon the express written consent of the owners of a majority of the voting power of the corporation.

(h) Any Transfer, or purported Transfer, of securities of the corporation shall be null and void unless the terms, conditions, and provisions of this bylaw are strictly observed and followed.

(i) The foregoing right of first refusal shall terminate upon the date securities of the corporation are first offered to the public pursuant to a registration statement filed with, and declared effective by, the SEC under the 1933 Act.

(j) The certificates representing shares of stock of the corporation shall bear on their face the following legend so long as the foregoing right of first refusal remains in effect:

“THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO A RIGHT OF FIRST REFUSAL OPTION IN FAVOR OF THE CORPORATION AND/OR ITS ASSIGNEE(S), AS PROVIDED IN THE BYLAWS OF THE CORPORATION.”

(k) To the extent this Section conflicts with any written agreements between the Company and the stockholder attempting to Transfer shares, such agreement shall control.

[Remainder of page intentionally left blank.]

The undersigned hereby certifies that he is the duly elected and acting Secretary of Artiva Biotherapeutics, Inc. (the “*Company*”) and that the First Amendment to Bylaws attached hereto was duly adopted by the Board of Directors of the Company on June 25, 2020.

IN WITNESS WHEREOF, the undersigned has hereunto set his hand as of the 25th day of June, 2020.

/s/ Thomas J. Farrell

Thomas J. Farrell

Secretary

AMENDED AND RESTATED BYLAWS
OF
ARTIVA BIOTHERAPEUTICS, INC.

(A DELAWARE CORPORATION)

ARTICLE I

OFFICES

Section 1.1. Registered Office. The registered office of Artiva Biotherapeutics, Inc. (the “**Corporation**”) in the State of Delaware and the name of the Corporation’s registered agent at such address shall be as set forth in the certificate of incorporation of the Corporation (as the same may be amended and/or restated from time to time, the “**Certificate of Incorporation**”).

Section 1.2. Other Offices. The Corporation may at any time establish other offices both within and without the State of Delaware.

ARTICLE II

CORPORATE SEAL

Section 2.1. Corporate Seal. The Board of Directors of the Corporation (the “**Board**”) may adopt a corporate seal. Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS’ MEETINGS

Section 3.1. Place of Meetings. Meetings of the stockholders of the Corporation may be held at such place, if any, either within or without the State of Delaware, as may be determined from time to time by the Board. The Board may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as provided under the General Corporation Law of the State of Delaware (“**DGCL**”) and Section 3.9 below.

Section 3.2. Annual Meetings.

(a) The annual meeting of the stockholders of the Corporation, for the purpose of election of directors and for such other business as may properly come before it, shall be held on such date and time as may be determined from time to time by the Board. Any annual meeting of stockholders previously scheduled by the Board may be postponed, rescheduled or cancelled by the Board, or any director or officer of the Corporation to whom the Board delegates such authority, at any time before or after notice of such meeting has been given to stockholders. Nominations of persons for election to the Board and proposals of other business to be considered by the stockholders may be made at an annual meeting of stockholders: (i)

pursuant to the Corporation's notice of meeting of stockholders (or any supplement thereto); (ii) by or at the direction of the Board or a duly authorized committee thereof; or (iii) by any stockholder of the Corporation who was a stockholder of record at the time of giving the stockholder's notice provided for in Section 3.2(b) of these bylaws (as may be amended and/or restated from time to time, the "**Bylaws**") and who is a stockholder of record at the time of the annual meeting of stockholders, who is entitled to vote at the meeting and who complied with the notice procedures set forth in this Section 3.2. For the avoidance of doubt, clause (iii) above shall be the exclusive means for a stockholder to make nominations and submit other business before an annual meeting of stockholders.

(b) At an annual meeting of the stockholders, only such business shall be conducted as is a proper matter for stockholder action under the DGCL, the Certificate of Incorporation and the Bylaws, and only such nominations shall be made and such business shall be conducted as shall have been properly brought before the meeting in accordance with the procedures below.

- (i) For nominations for the election to the Board to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 3.2(a), the stockholder must deliver written notice to the Secretary at the principal executive offices of the Corporation on a timely basis as set forth in Section 3.2(b)(3) and must update and supplement the information contained in such written notice on a timely basis as set forth in Section 3.2(c). Such stockholder's notice shall include: (A) as to each nominee such stockholder proposes to nominate at the meeting: (1) the name, age, business address and residence address of such nominee, (2) the principal occupation or employment of such nominee, (3) the class or series and number of shares of each class or series of capital stock of the Corporation that are owned of record and beneficially by such nominee and list of any pledge of or encumbrances on such shares, (4) the date or dates on which such shares were acquired and the investment intent of such acquisition, (5) the questionnaire, representation and agreement required by Section 3.2(e), completed and signed by such nominee, and (6) all other information concerning such nominee as would be required to be disclosed in a proxy statement soliciting proxies for the election of such nominee as a director in an election contest (even if an election contest is not involved and whether or not proxies are being or will be solicited), or that is otherwise required to be disclosed or provided to the Corporation pursuant to Section 14 of the Securities Exchange Act of 1934, as amended (the "**1934 Act**") (including such person's written consent to being named in a proxy statement, associated proxy card and other filings as a nominee and to serving as a director if elected); and (B) all of the information required by Section 3.2(b)(4). The Corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as a director of the Corporation and to determine the independence (as such term is used in any applicable stock exchange listing requirements or applicable law) of such proposed nominee or to determine the eligibility of such proposed nominee to serve on any committee or sub-committee of the Board under any applicable stock exchange listing requirements or applicable law, or that the Board determines could be material to a reasonable stockholder's understanding of the background, qualifications, experience, independence, or lack thereof, of such proposed nominee. The number of nominees a stockholder may nominate for election at an annual meeting on its own behalf (or in the case of a stockholder giving the notice on behalf of a beneficial owner, the number of nominees a stockholder may nominate for election at an annual meeting on behalf of such beneficial owner) shall not exceed the number of directors to be elected at such annual meeting. A stockholder may not designate any substitute nominees unless the stockholder provides timely notice of such substitute nominee(s) in accordance with this Section 3.2, in the case of an annual meeting, or Section 3.3, in the case of a special meeting (and such notice contains all of the information, representations, questionnaires and certifications with respect to such substitute nominee(s) that are required by the Bylaws with respect to nominees for director).

- (ii) For business other than nominations for the election to the Board to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 3.2(a), the stockholder must deliver written notice to the Secretary at the principal executive offices of the Corporation on a timely basis as set forth in Section 3.2(b)(3), and must update and supplement the information contained in such written notice on a timely basis as set forth in Section 3.2(c). Such stockholder's notice shall include: (A) as to each matter such stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the text of the proposal or business (including the text of any resolutions proposed for consideration and in the event that such business includes a proposal to amend the Bylaws, the language of the proposed amendment), the reasons for conducting such business at the meeting, and any material interest (including any anticipated benefit of such business to any Proponent (as defined below) other than solely as a result of its ownership of the Corporation's capital stock, that is material to any Proponent individually, or to the Proponents in the aggregate) in such business of any Proponent; and (B) all of the information required by Section 3.2(b)(4).
- (iii) To be timely, the written notice required by Section 3.2(b)(1) or 3.2(b)(2) must be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the 90th day, nor earlier than the 120th day, prior to the first anniversary of the immediately preceding year's annual meeting (for purposes of notice required for action to be taken at the Corporation's first annual meeting of stockholders after its initial public offering of common stock, the date of the immediately preceding year's annual meeting shall be deemed to have occurred on June 15 in such immediately preceding calendar year); provided, however, that, subject to the last sentence of this Section 3.2(b)(3), in the event that the date of the annual meeting is advanced more than 30 days prior to or delayed by more than 70 days after the anniversary of the preceding year's annual meeting, or if no annual meeting was held (or deemed to have been held), notice by the stockholder to be timely must be so received not earlier than the 120th day prior to such annual meeting and not later than the later of the close of business on (i) the 90th day prior to such annual meeting or (ii) the tenth day following the day on which public announcement of the date of such meeting is first made by the Corporation. In no event shall an adjournment or postponement (or the public announcement thereof) of an annual meeting for which notice has been given, or for which a public announcement of the date of the meeting has been made by the Corporation, commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.
- (iv) The written notice required by Sections 3.2(b)(1) or 3.2(b)(2) shall also include, as of the date of the notice and as to the stockholder giving the notice, the beneficial owner, if any, on whose behalf the nomination or proposal is made and any affiliate who controls either of the foregoing stockholder or beneficial owner, directly or indirectly (each, a "**Proponent**" and collectively, the "**Proponents**"): (A) the name and address of each Proponent, including, if applicable, such name and address as they appear on the Corporation's books and records; (B) the class, series and number of shares of each class or series of the capital stock of the Corporation that are, directly or indirectly, owned of record or beneficially (within the meaning of Rule 13d-3 under the 1934 Act) by each Proponent (provided, that for purposes of this Section 3.2(b)(4), such Proponent shall in all events be deemed to beneficially own all shares of any class or series of capital stock of the Corporation as to which such Proponent or any of its affiliates or associates has a right to acquire beneficial ownership whether immediately or at any time in the future); (C) a description of any agreement, arrangement or understanding (whether oral or in writing) with respect to such nomination or proposal (and/or the voting of shares of any class or series of capital stock of the Corporation) between or among any Proponent and any of its affiliates or associates, and/or any other persons (including their names) including without limitation, any agreements, arrangements or understandings required to be disclosed pursuant to Item 5 or Item 6 of 1934 Act Schedule 13D, regardless of whether the requirement to file a Schedule 13D is applicable; (D) a representation that the stockholder is a holder of record of shares of the

Corporation at the time of giving notice, will be entitled to vote at the meeting, and that such stockholder (or a qualified representative thereof) intends to appear at the meeting to nominate the person or persons specified in the notice (with respect to a notice under Section 3.2(b)(1)) or to propose the business that is specified in the notice (with respect to a notice under Section 3.2(b)(2)); (E) a representation whether any Proponent or any other participant (as defined in Item 4 of Schedule 14A under the 1934 Act) will engage in a solicitation with respect to such nomination or proposal and, if so, the name of each participant in such solicitation and the amount of the cost of solicitation that has been and will be borne, directly or indirectly, by each participant in such solicitation, and a representation as to whether the Proponents intend or are part of a group which intends (x) to deliver, or make available, a proxy statement and/or form of proxy to holders of at least the percentage of the Corporation's voting shares required to approve or adopt the proposal or elect the nominee, (y) to otherwise solicit proxies or votes from stockholders in support of such proposal or nomination and/or (z) to solicit proxies in support of any proposed nominee in accordance with Rule 14a-19 promulgated under the 1934 Act; (F) a description of all Derivative Transactions (as defined below) by each Proponent during the previous 12-month period, including the date of the transactions and the class, series and number of securities involved in, and the material economic or voting terms of, such Derivative Transactions; (G) a certification regarding whether each Proponent has complied with all applicable federal, state and other legal requirements in connection with such Proponent's acquisition of shares of capital stock or other securities of the Corporation and/or such Proponent's acts or omissions as a stockholder or beneficial owner of the Corporation; and (H) any other information relating to each Proponent required to be disclosed in a proxy statement or other filings required to be made in connection with solicitations of proxies for, as applicable, the proposal and/or for the election of directors in an election contest pursuant to and in accordance with Section 14 of the 1934 Act and the rules and regulations promulgated thereunder.

(c) A stockholder providing the written notice required by Section 3.2(b)(1) or (2) shall update and supplement such notice in writing, if necessary, so that the information (other than the representations required by Section 3.2(b)(4)(E)) provided or required to be provided in such notice is true and correct in all material respects as of (i) the record date for the determination of stockholders entitled to notice of the meeting and (ii) the date that is five Business Days (as defined below) prior to the meeting and, in the event of any adjournment or postponement thereof, five Business Days prior to such adjourned or postponed meeting; provided, that no such update or supplement shall cure or affect the accuracy (or inaccuracy) of any representations made by any Proponent, any of its affiliates or associates, or a nominee or the validity (or invalidity) of any nomination or proposal that failed to comply with this Section 3.2 or is rendered invalid as a result of any inaccuracy therein. In the case of an update and supplement pursuant to clause (i) of this Section 3.2(c), such update and supplement must be received by the Secretary at the principal executive offices of the Corporation not later than five Business Days after the later of the record date for the determination of stockholders entitled to notice of the meeting or the public announcement of such record date. In the case of an update and supplement pursuant to clause (ii) of this Section 3.2(c), such update and supplement shall be received by the Secretary at the principal executive offices of the Corporation not later than two Business Days prior to the date for the meeting, and, in the event of any adjournment or postponement thereof, two Business Days prior to such adjourned or postponed meeting (or not later than the day prior to such adjourned or postponed meeting if there are fewer than two Business Days between the date for the meeting, or the date of the immediately preceding adjournment or postponement thereof, and the date for the adjourned or postponed meeting).

(d) Notwithstanding anything in Section 3.2(b)(3) to the contrary, in the event that the number of directors to be elected to the Board at an annual meeting is increased and there is no public announcement by the Corporation naming all of the nominees for director or specifying the size of the increased Board at least 10 days before the last day a stockholder may deliver a notice of nomination in accordance with Section 3.2(b)(3), a stockholder's notice required by this Section 3.2 and that complies with the requirements in Section 3.2(b)(1), other than the timing requirements in Section 3.2(b)(3), shall also be considered timely, but only with respect to nominees for the new positions created by such increase, if it shall be received by the Secretary at the principal executive offices of the Corporation not later than the close of business on the tenth day following the day on which such public announcement is first made by the Corporation.

(e) To be eligible to be a nominee for election or re-election as a director of the Corporation pursuant to a nomination under clause (iii) of Section 3.2(a) or clause (ii) of Section 3.3(c), each Proponent must deliver (in accordance with the time periods prescribed for delivery of notice under Sections 3.2(b) (3), 3.2(d) or 3.3(c), as applicable) to the Secretary at the principal executive offices of the Corporation a written questionnaire with respect to the background, qualifications, stock ownership and independence of such proposed nominee and the background of any other person or entity on whose behalf the nomination is being made (in the form provided by the Secretary within 10 days following a written request therefor by a stockholder of record) and a written representation and agreement (in the form provided by the Secretary within 10 days following written request therefor by a stockholder of record) that such person (i) is not and will not become a party to (A) any agreement, arrangement or understanding (whether oral or in writing) with, and has not given any commitment or assurance to, any person or entity as to how such person, if elected as a director of the Corporation, will act or vote on any issue or question (a **“Voting Commitment”**) that has not been disclosed in the questionnaire or (B) any Voting Commitment that could limit or interfere with such person’s ability to comply, if elected as a director of the Corporation, with such person’s fiduciary duties under applicable law; (ii) is not and will not become a party to any agreement, arrangement or understanding (whether oral or in writing) with any person or entity other than the Corporation with respect to any direct or indirect compensation, reimbursement or indemnification in connection with service or action as a director of the Corporation or a nominee that has not been disclosed in such questionnaire; (iii) would be in compliance, if elected as a director of the Corporation, and will comply with, all applicable corporate governance, conflict of interest, confidentiality and stock ownership and trading policies and guidelines of the Corporation that are publicly disclosed or which were provided by the Secretary with the written representation and agreement required by this Section 3.2(e); and (iv) if elected as a director of the Corporation, intends to serve the entire term until the next meeting at which such candidate would face re-election.

(f) A person shall not be eligible for election or re-election as a director, unless the person is nominated, in the case of an annual meeting, in accordance with clause (ii) or (iii) of Section 3.2(a) and in accordance with the procedures set forth in Section 3.2(b), Section 3.2(c), Section 3.2(d), Section 3.2(e) and Section 3.2(f), as applicable, or in the case of a special meeting, in accordance with Section 3.3(c) of the Bylaws and the requirements thereof. Only such business shall be conducted at any annual meeting of the stockholders of the Corporation as shall have been brought before the meeting in accordance with Section 3.2(a) and in accordance with the procedures set forth in Section 3.2(b), Section 3.2(c) and Section 3.2(f), as applicable. Notwithstanding anything to the contrary in the Bylaws, unless otherwise required by applicable law, in the event that any Proponent (i) provides notice pursuant to Rule 14a-19(b) promulgated under the 1934 Act with respect to one or more proposed nominees and (ii) subsequently (x) fails to comply with the requirements of Rule 14a-19 promulgated under the 1934 Act (or fails to timely provide reasonable evidence sufficient to satisfy the Corporation that such Proponent has met the requirements of Rule 14a-19(a)(3) promulgated under the 1934 Act in accordance with the next sentence) or (y) fails to inform the Corporation that they no longer plan to solicit proxies in accordance with the requirements of Rule 14a-19 under the 1934 Act by delivering a written notice to the Secretary at the principal executive offices of the Corporation within two (2) Business Days after the occurrence of such change, then the nomination of each such proposed nominee shall be disregarded (and such nominee disqualified from standing for election or re-election), notwithstanding that the nominee is included (as applicable) as a nominee in the Corporation’s proxy statement, notice of meeting or other proxy materials for any stockholder meeting (or any supplement thereto) and notwithstanding that proxies or votes in respect of the election of such proposed nominees may

have been received by the Corporation (which proxies and votes shall be disregarded). If any Proponent provides notice pursuant to Rule 14a-19(b) promulgated under the 1934 Act, such Proponent shall deliver to the Corporation, no later than five (5) Business Days prior to the applicable meeting, reasonable evidence that it has met the requirements of Rule 14a-19(a)(3) promulgated under the 1934 Act. Notwithstanding anything to the contrary set forth herein, and for the avoidance of doubt, the nomination of any person whose name is included (as applicable) as a nominee in the Corporation's proxy statement, notice of meeting or other proxy materials for any stockholder meeting (or any supplement thereto) as a result of any notice provided by any Proponent pursuant to Rule 14a-19(b) promulgated under the 1934 Act with respect to such proposed nominee and whose nomination is not made by or at the direction of the Board or any authorized committee thereof shall not be deemed (for purposes of clause (i) of Section 3.2(a) or otherwise) to have been made pursuant to the Corporation's notice of meeting (or any supplement thereto) and any such nominee may only be nominated by a Proponent pursuant to clause (iii) of Section 3.2(a) and, in the case of a special meeting of stockholders, pursuant to and to the extent permitted under Section 3.3(c). Except as otherwise required by applicable law, the chairperson of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the procedures and requirements set forth in the Bylaws (including, without limitation, compliance with Rule 14a-19 promulgated under the 1934 Act) and, if any proposed nomination or business is not in compliance with the Bylaws, or the Proponent does not act in accordance with the representations required in this Section 3.2, to declare that such proposal or nomination shall not be presented for stockholder action at the meeting and shall be disregarded (and such nominee disqualified from standing for election or re-election), or that such business shall not be transacted, notwithstanding that such proposal or nomination is set forth in (as applicable) the Corporation's proxy statement, notice of meeting or other proxy materials and notwithstanding that proxies or votes in respect of such nomination or such business may have been solicited or received. Notwithstanding the foregoing provisions of this Section 3.2, unless otherwise required by applicable law, if the stockholder (or a qualified representative of the stockholder) does not appear at the annual meeting of stockholders of the Corporation to present a nomination or proposed business, such nomination shall be disregarded (and such nominee disqualified from standing for election or re-election) and such proposed business shall not be transacted, notwithstanding that such nomination or proposed business is set forth in (as applicable) the Corporation's proxy statement, notice of meeting or other proxy materials and notwithstanding that proxies or votes in respect of such vote may have been solicited or received by the Corporation. For purposes of this Section 3.2, to be considered a qualified representative of the stockholder, a person must be a duly authorized officer, manager, trustee or partner of such stockholder or must be authorized by a writing executed by such stockholder or an electronic transmission delivered by such stockholder to act for such stockholder as proxy at the meeting of stockholders, and such writing or electronic transmission, or a reliable reproduction of the writing or electronic transmission, shall be provided to the Secretary of the Corporation at least five Business Days prior to the meeting of stockholders.

(g) For purposes of Sections 3.2 and 3.3,

- (i) **"affiliates"** and **"associates"** shall have the meanings set forth in Rule 405 under the Securities Act of 1933, as amended (the **"1933 Act"**);
- (ii) **"Business Day"** means any day other than Saturday, Sunday or a day on which banks are closed in New York City, New York;
- (iii) **"close of business"** means 6:00 p.m. local time at the principal executive offices of the Corporation on any calendar day, whether or not the day is a Business Day;
- (iv) **"Derivative Transaction"** means any agreement, arrangement, interest or understanding entered into by, or on behalf or for the benefit of, any Proponent or any of its affiliates or associates, whether

record or beneficial: (A) the value of which is derived in whole or in part from the value of any class or series of shares or other securities of the Corporation; (B) that otherwise provides any direct or indirect opportunity to gain or share in any gain derived from a change in the value of securities of the Corporation; (C) the effect or intent of which is to mitigate loss, manage risk or benefit from changes in value or price with respect to any securities of the Corporation; or (D) that provides the right to vote or increase or decrease the voting power of, such Proponent, or any of its affiliates or associates, directly or indirectly, with respect to any securities of the Corporation, which agreement, arrangement, interest or understanding may include, without limitation, any option, warrant, debt position, note, bond, convertible security, swap, stock appreciation or similar right, short position, profit interest, hedge, right to dividends, voting agreement, performance-related fee or arrangement to borrow or lend shares (whether or not subject to payment, settlement, exercise or conversion in any such class or series), and any proportionate interest of such Proponent in the securities of the Corporation held by any general or limited partnership, or any limited liability company, of which such Proponent is, directly or indirectly, a general partner or managing member; and

- (v) “**public announcement**” means disclosure in a press release reported by the Dow Jones News Service, Associated Press, Business Wire, GlobeNewswire or comparable national news service or in a document publicly filed by the Corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the 1934 Act or by such other means reasonably designed to inform the public or security holders in general of such information, including, without limitation, posting on the Corporation’s investor relations website.

Section 3.3. Special Meetings.

(a) Special meetings of the stockholders of the Corporation may only be called in the manner provided in the Certificate of Incorporation. Any special meeting of stockholders previously scheduled by the Board may be postponed, rescheduled or cancelled by the Board, or any director or officer to whom the Board has delegated such authority, at any time before or after notice of such meeting has been given to stockholders.

(b) The Board shall determine the date and time of such special meeting. Upon determination of the date, time and place, if any, of the meeting, the Secretary shall cause a notice of meeting to be given to the stockholders entitled to vote, in accordance with the provisions of Section 3.4.

(c) Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting pursuant to the Corporation’s notice of meeting. Nominations of persons for election to the Board may be made at a special meeting of stockholders at which directors are to be elected (i) by or at the direction of the Board or a duly authorized committee thereof or (ii) by any stockholder of the Corporation who is a stockholder of record at the time of giving notice provided for in this paragraph and who is a stockholder of record at the time of the special meeting, who is entitled to vote at the meeting and who complies with Sections 3.2(b)(1), 3.2(b)(4), 3.2(c), 3.2(e) and 3.2(f). The number of nominees a stockholder may nominate for election at a special meeting on its own behalf (or in the case of a stockholder giving the notice on behalf of a beneficial owner, the number of nominees a stockholder may nominate for election at a special meeting on behalf of such beneficial owner) shall not exceed the number of directors to be elected at such special meeting. In the event the Corporation calls a special meeting of stockholders for the purpose of submitting a proposal to stockholders for the election of one or more directors, any such stockholder of record entitled to vote in such election of directors may nominate a person or persons (as the case may be), for election to such position(s) as specified in the Corporation’s notice of meeting, if written notice setting forth the information required by Sections 3.2(b)(1) and 3.2(b)(4) shall be received by the Secretary at the principal executive offices of the Corporation not earlier than the 120th day prior to such special meeting and not later than the close of business on the later of (i) the 90th day prior to such meeting or (ii) the tenth day following the day on which the Corporation first makes a public announcement of the

date of the special meeting at which directors are to be elected. The stockholder shall also update and supplement such information as required under Section 3.2(c). In no event shall an adjournment or a postponement (or the public announcement thereof) of a special meeting for which notice has been given, or for which a public announcement of the date of the meeting has been made by the Corporation, commence a new time period (or extend any time period) for the giving of a stockholder's notice as described above.

(d) A person shall not be eligible for election or re-election as a director at the special meeting unless the person is nominated either in accordance with clause (i) or clause (ii) of Section 3.3(c). Except as otherwise required by applicable law, the chairperson of the meeting shall have the power and duty to determine whether a nomination was made in accordance with the procedures and requirements set forth in the Bylaws and, if any proposed nomination is not in compliance with the Bylaws (including, without limitation, compliance with Rule 14a-19 under the 1934 Act), or if the Proponent does not act in accordance with the representations required in Section 3.2, to declare that such nomination shall not be presented for stockholder action at the meeting and shall be disregarded (and such nominee disqualified from standing for election or re-election), notwithstanding that such nomination is set forth in (as applicable) the Corporation's proxy statement, notice of meeting or other proxy materials and notwithstanding that proxies or votes in respect of such nomination may have been solicited or received. Notwithstanding the foregoing provisions of this Section 3.3, unless otherwise required by applicable law, if the stockholder (or a qualified representative of the stockholder (meeting the requirements specified in Section 3.2(f)) does not appear at the special meeting of stockholders of the Corporation to present a nomination, such nomination shall be disregarded (and such nominee disqualified from standing for election or re-election), notwithstanding that the nomination is set forth (as applicable) in the Corporation's proxy statement, notice of meeting or other proxy materials and notwithstanding that proxies or votes in respect of such nomination may have been solicited or received by the Corporation.

(e) Notwithstanding the foregoing provisions of Sections 3.2 and 3.3, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations promulgated thereunder with respect to the matters set forth in Sections 3.2 and 3.3, and any failure to comply with such requirements shall be deemed a failure to comply with Sections 3.2 or 3.3, as applicable; provided, however, that, to the fullest extent not prohibited by applicable law, any references in the Bylaws to the 1934 Act or the rules and regulations promulgated thereunder are not intended to and shall not limit the requirements applicable to proposals and/or nominations to be considered pursuant to Sections 3.2(a)(iii) and 3.3(c). Nothing in the Bylaws shall be deemed to affect any rights of holders of any class or series of preferred stock to nominate and elect directors pursuant to and to the extent provided in any applicable provision of the Certificate of Incorporation.

Section 3.4. Notice of Meetings. Except as otherwise provided by applicable law, the Certificate of Incorporation or the Bylaws, notice of each meeting of stockholders shall be given not less than ten nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting as of the record date for determining the stockholders entitled to notice of such meeting. Such notice shall specify the date, time and place, if any, of the meeting, the record date for determining stockholders entitled to vote at the meeting, if such record date is different from the record date for determining stockholders entitled to notice of the meeting, and the means of remote communications, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at any such meeting, and, in the case of special meetings, the purpose or purposes of the meeting.

Section 3.5. Quorum and Vote Required. At all meetings of stockholders, except where otherwise required by law or by the Certificate of Incorporation, or by the Bylaws, the presence, in person, by remote communication, if applicable, or by proxy, of the holders of a majority of the voting power of the outstanding shares of stock entitled to vote at the meeting shall constitute a quorum for the transaction of business. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

Unless a different or minimum vote is provided by law or by applicable stock exchange rules, or by the Certificate of Incorporation or the Bylaws, in which case such different or minimum vote shall be the applicable vote on the matter, in all matters other than the election of directors, the affirmative vote of a majority of the votes cast on such matter, voting affirmatively or negatively (excluding abstentions and broker non-votes) shall be the act of the stockholders. Except as otherwise required by law, the Certificate of Incorporation or the Bylaws, directors shall be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy at the meeting and entitled to vote in the election of directors. Where a separate vote by a class or classes or series is required, except as required by law or by the Certificate of Incorporation or the Bylaws, the holders of a majority of the voting power of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter. Unless a different or minimum vote is provided by law or by the Certificate of Incorporation or the Bylaws or any applicable stock exchange rules, in which case such different or minimum vote shall be the applicable vote on the matter, the affirmative vote of the holders of a majority (or plurality, in the case of the election of directors) of the votes cast on such matter, voting affirmatively or negatively (excluding abstentions and broker non-votes) shall be the act of such class or classes or series.

Section 3.6. Adjournment and Notice of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairperson of the meeting or by the stockholders by the affirmative vote of a majority of the votes cast, voting affirmatively or negatively (excluding abstentions and broker non-votes). When a meeting is adjourned to another time or place, if any, (including an adjournment taken to address a technical failure to convene or continue a meeting using remote communication) notice need not be given of the adjourned meeting if the time and place, if any, thereof and the means of remote communication, if any, by which stockholders and proxyholders may be deemed present in person and may vote at such meeting are announced at the meeting at which the adjournment is taken or are (i) displayed, during the time scheduled for the meeting, on the same electronic network used to enable stockholders and proxy holders to participate in the meeting by means of remote communication or (ii) set forth in the notice of meeting given in accordance with Section 3.4. At the adjourned meeting, the Corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than 30 days, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. If after the adjournment a new record date for determination of stockholders entitled to vote is fixed for the adjourned meeting, the Board shall fix as the record date for determining stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote at the adjourned meeting, and shall give notice of the adjourned meeting to each stockholder of record entitled to vote at such adjourned meeting as of the record date so fixed for notice of such adjourned meeting.

Section 3.7. Voting Rights. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders or adjournment thereof, except as otherwise provided by applicable law, only persons in whose names shares stand on the stock records of the Corporation on the record date shall be entitled to vote at any meeting of stockholders. Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy. No proxy shall be voted after three years from its date of creation unless the proxy provides for a longer period. Voting at meetings of stockholders need not be by written ballot. Any stockholder directly or indirectly soliciting proxies from other stockholders must use a proxy card color other than white, which shall be reserved for the exclusive use by the Board.

Section 3.8. List of Stockholders. The corporation shall prepare, no later than the tenth day before each meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder; provided, however, if the record date for determining the stockholders entitled to vote is less than ten days before the meeting date, the list shall reflect all of the stockholders entitled to vote as of the tenth day before the meeting date. Nothing in this Section 3.8 shall require the corporation to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting for a period of ten days ending on the day before the meeting date: (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the Corporation. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to stockholders of the Corporation.

Section 3.9. Remote Communication; Delivery to the Corporation.

(a) If authorized by the Board in its sole discretion, and subject to such guidelines and procedures as the Board may adopt, stockholders and proxyholders not physically present at a stockholder meeting may, by means of remote communication:

- (i) participate in a meeting of stockholders; and
- (ii) be deemed present in person and vote at a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote communication, provided that (i) the Corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder, (ii) the Corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (iii) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the Corporation.

(b) Whenever Section 3.2 or 3.3 requires one or more persons (including a record or beneficial owner of capital stock) to deliver a document or information to the Corporation or any officer, employee or agent thereof (including any notice, request, questionnaire, revocation, representation or other document or agreement), such document or information shall be in writing exclusively (and not in an electronic transmission) and shall be delivered exclusively by hand (including, without limitation, overnight courier service) or by certified or registered mail, return receipt requested and the Corporation shall not be required to accept delivery of any document not in such written form or so delivered.

Section 3.10. Organization.

(a) At every meeting of stockholders, a person designated by the Board shall act as chairperson of the meeting of stockholders. If no chairperson of the meeting of stockholders is so designated, then the Chairperson of the Board, or if no Chairperson has been appointed, is absent or refuses to act, the Chief Executive Officer, or if no Chief Executive Officer is then serving or the Chief Executive Officer is absent or refuses to act, the President, or, if the President is absent or refuses to act, a chairperson of the meeting chosen by the stockholders by the affirmative vote of a majority of the votes cast, voting affirmatively or negatively (excluding abstentions and broker non-votes), shall act as chairperson of the meeting of stockholders. A person designated by the Board shall act as secretary of the meeting. If no secretary of the meeting is designated, then the Secretary, or, in the Secretary's absence, an Assistant Secretary or other officer or other person directed to do so by the chairperson of the meeting, shall act as secretary of the meeting.

(b) The Board shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board, if any, the chairperson of the meeting shall have the right and authority to convene and (for any or no reason) to recess and/or adjourn the meeting, to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairperson, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the Corporation and their duly authorized and constituted proxies and such other persons as the chairperson shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters that are to be voted on by ballot. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting. Unless and to the extent determined by the Board or the chairperson of the meeting, meetings of stockholders shall not be required to be held in accordance with rules of parliamentary procedure.

(c) The Corporation may and shall, if required by applicable law, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the chairperson of the meeting shall appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of the duties of inspector, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of such inspector's ability. The inspectors shall: (1) ascertain the number of shares outstanding and the voting power of each; (2) determine the shares represented at a meeting and the validity of proxies and ballots; (3) count all votes and ballots; (4) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors; and (5) certify their determination of the number of shares represented at the meeting, and their count of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors. In determining the validity and counting of proxies and ballots, the inspectors shall be limited to an examination of the proxies, any envelopes submitted with those proxies, any information provided in accordance with Sections 211(e) or 212(c)(2) of the DGCL, or any information provided pursuant to Sections 211(a)(2)b.(i) or (iii) of the DGCL, ballots and the regular books and records of the Corporation, except that the inspectors may consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers, their nominees or similar persons which represent more votes than the holder of a proxy is authorized by the record owner to cast or more votes than the stockholder holds of record. If the inspectors consider other reliable information for the limited purpose permitted herein, the inspectors at the time they make their certification pursuant to Section 231(b)(5) of the DGCL shall specify the precise information considered by them including the person or persons from whom they obtained the information, when the information was obtained, the means by which the information was obtained and the basis for the inspectors' belief that such information is accurate and reliable.

ARTICLE IV

DIRECTORS

Section 4.1. Number. The authorized number of directors of the Corporation shall be fixed in accordance with the Certificate of Incorporation.

Section 4.2. Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board, except as may be otherwise provided by the Certificate of Incorporation or the DGCL.

Section 4.3. Terms. The terms of directors shall be as set forth in the Certificate of Incorporation.

Section 4.4. Vacancies; Newly Created Directorships. Vacancies and newly created directorships on the Board shall be filled as set forth in the Certificate of Incorporation, except as otherwise required by applicable law.

Section 4.5. Resignation. Any director may resign at any time by delivering such director's notice in writing or by electronic transmission to the Board or the Secretary. Such resignation shall take effect at the time of delivery of the notice or at any later time specified therein. Acceptance of such resignation shall not be necessary to make it effective. When one or more directors shall resign from the Board, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each director so chosen shall hold office for the unexpired portion of the term of the director whose place shall be vacated and until such director's successor shall have been duly elected and qualified or until such director's earlier death, resignation or removal.

Section 4.6. Removal. Directors shall be removed as set forth in the Certificate of Incorporation.

Section 4.7. Meetings.

(a) Regular Meetings. Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board may be held at any time or date and at any place, if any, within or outside of the State of Delaware that has been designated by the Board and publicized among all directors, either orally or in writing, by telephone, including a voice-messaging system or other system designed to record and communicate messages, facsimile or by electronic mail or other electronic means. No further notice shall be required for regular meetings of the Board.

(b) Special Meetings. Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board may be held at any time and place, if any, within or without the State of Delaware as designated and called by the Chairperson of the Board, the Chief Executive Officer or the Board.

(c) Meetings by Electronic Communications Equipment. Any member of the Board, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.

(d) Notice of Special Meetings. Notice of the time and place, if any, of all special meetings of the Board shall be given orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, or by electronic mail or other means of electronic transmission at least 24 hours before the date and time of the meeting. If notice is sent by U.S. mail, it shall be sent by first class mail, postage prepaid, at least three days before the date of the meeting.

Section 4.8. Quorum and Voting.

(a) Except as otherwise required by the DGCL, the Certificate of Incorporation or the Bylaws, a quorum of the Board shall consist of a majority of the authorized number of directors fixed from time to time by the Board in accordance with the Certificate of Incorporation; provided, however, at any meeting whether a quorum be present or otherwise, a majority of the directors present may adjourn the meeting to another time, without notice other than by announcement at the meeting.

(b) At each meeting of the Board at which a quorum is present, all questions and business shall be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by applicable law, the Certificate of Incorporation or the Bylaws.

Section 4.9. Action without Meeting. Unless otherwise restricted by the Certificate of Incorporation or the Bylaws, any action required or permitted to be taken at any meeting of the Board or of any committee thereof may be taken without a meeting, if all members of the Board or committee, as the case may be, consent thereto in writing or by electronic transmission. After an action is taken, such consent or consents shall be filed with the minutes of proceedings of the Board or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 4.10. Fees and Compensation. Unless otherwise restricted by the Certificate of Incorporation or the Bylaws, the Board, or any duly authorized committee thereof, shall have the authority to fix the compensation, including fees and reimbursement of expenses, of directors for services to the Corporation in any capacity.

Section 4.11. Committees.

(a) Committees. The Board may, from time to time, appoint such committees as may be permitted by applicable law. Such committees appointed by the Board shall consist of one or more members of the Board and to the extent permitted by applicable law and provided in the resolution of the Board shall have and may exercise all the powers and authority of the Board in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any Bylaw of the Corporation.

(b) Term. The Board, subject to any requirements of any outstanding series of preferred stock and the provisions of subsection (a) of this Section 4.11, may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member shall terminate on the date of such committee member's death, such person's resignation from the committee or on such date that the committee member, for any reason, is no longer a member of the Board. The Board may at any time for any reason remove any individual committee member and the Board may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member.

(c) Meetings. Unless the Board shall otherwise provide, regular meetings of any committee appointed pursuant to this Section 4.11 shall be held at such times and places, if any, as are determined by the Board, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at such place, if any, that has been determined from time to time by such committee, and may be called by any director who is a member of such committee, upon notice to the members of such committee of the time and place, if any, of such special meeting given in the manner provided for the giving of notice to members of the Board of the time and place, if any, of special meetings of the Board. Unless otherwise provided by the Board in the resolutions authorizing the creation of the committee, the presence of at least a majority of the members of the committee then serving shall be necessary to constitute a quorum unless the committee shall consist of one or two members, in which event one member shall constitute a quorum; and all matters shall be determined by the affirmative vote of a majority of the members present at a meeting of the committee at which a quorum is present.

Section 4.12. Duties of Chairperson of the Board. The Board shall elect from its ranks a Chairperson of the Board. The Chairperson of the Board shall perform such other duties customarily associated with the office and shall also perform such other duties and have such other powers, as the Board shall designate from time to time. The Chairperson of the Board, when present, shall preside at all meetings of the Board in accordance with Section 4.13 of the Bylaws.

Section 4.13. Organization. At every meeting of the directors, the Chairperson of the Board shall act as chairperson of the meeting. If a Chairperson has not been appointed or is absent, the Chief Executive Officer (if a director), or, if a Chief Executive Officer is absent, the President (if a director), or, in the absence of any such person, a chairperson of the meeting chosen by a majority of the directors present, shall preside over the meeting. The Secretary, or in the Secretary's absence, any Assistant Secretary or other officer, director or other person directed to do so by the person presiding over the meeting, shall act as secretary of the meeting.

ARTICLE V

OFFICERS

Section 5.1. Officers Designated. The officers of the Corporation shall include, if and when designated by the Board, the Chief Executive Officer, the President, the Secretary and the Treasurer. The Board may also appoint one or more Assistant Secretaries and Assistant Treasurers and such other officers and agents with such powers and duties as it shall deem appropriate or necessary. The Board may assign such additional titles to one or more of the officers as it shall deem appropriate. Any one person may hold any number of offices of the Corporation at any one time unless specifically prohibited therefrom by applicable law, the Certificate of Incorporation or the Bylaws.

Section 5.2. Tenure and Duties of Officers.

(a) General. All officers shall hold office at the pleasure of the Board and until their successors shall have been duly elected and qualified, subject to such officer's earlier death, resignation or removal. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board or by a committee thereof to which the Board has delegated such responsibility or, if so authorized by the Board, by the Chief Executive Officer or another officer of the Corporation.

(b) Duties of Chief Executive Officer. The Chief Executive Officer shall preside, if a director, at all meetings of the Board, unless a Chairperson of the Board has been appointed and is present and willing to act. The Chief Executive Officer shall be the chief executive officer of the Corporation and, subject to the supervision, direction and control of the Board, shall have the general powers and duties of supervision, direction, management and control of the business and officers of the Corporation as are customarily associated with the position of Chief Executive Officer. To the extent that a Chief Executive Officer has been appointed and no President has been appointed, all references in the Bylaws to the President shall be deemed references to the Chief Executive Officer. The Chief Executive Officer shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers, as the Board shall designate from time to time.

(c) Duties of President. The President shall preside, if a director, at all meetings of the Board, unless a Chairperson of the Board or Chief Executive Officer has been appointed and is present and willing to act. Unless another officer has been appointed Chief Executive Officer of the Corporation, the President shall be the chief executive officer of the Corporation and, subject to the supervision, direction and control of the Board, shall have the general powers and duties of supervision, direction, management and control of the business and officers of the Corporation as are customarily associated with the position of President. The President shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers, as the Board (or the Chief Executive Officer, if the Chief Executive Officer and President are not the same person and the Board has delegated the designation of the President's duties to the Chief Executive Officer) shall designate from time to time.

(d) Duties of Secretary and Assistant Secretary. The Secretary shall attend all meetings of the stockholders and of the Board and shall record, or cause to be recorded, all acts, votes and proceedings thereof in the minute books of the Corporation. The Secretary shall give, or cause to be given, notice in conformity with the Bylaws of all meetings of the stockholders and of all meetings of the Board and any committee thereof requiring notice. The Secretary shall perform all other duties provided for in the Bylaws and other duties customarily associated with the office and shall also perform such other duties and have such other powers, as the Board or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time. The Chief Executive Officer, or if no Chief Executive Officer is then serving, the President may direct any Assistant Secretary or other officer to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers as the Board or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time.

(e) Duties of Treasurer and Assistant Treasurer. The Treasurer shall keep or cause to be kept the books of account of the Corporation in a thorough and proper manner and shall render statements of the financial affairs of the Corporation in such form and as often as required by the Board, the Chief Executive Officer or the President. The Treasurer, subject to the order of the Board, shall have the custody of all funds and securities of the Corporation. The Treasurer shall perform other duties customarily associated with the office and shall also perform such other duties and have such other powers as the Board or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time. The Chief Executive Officer, or if no Chief Executive Officer is then serving, the President may direct any Assistant Treasurer or other officer to assume and perform the duties of the Treasurer in the absence or disability of the Treasurer, and each Assistant Treasurer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time.

Section 5.3. Delegation of Authority. The Board may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

Section 5.4. Resignations. Any officer may resign at any time by giving notice in writing or by electronic transmission to the Board, the Chairperson of the Board, the Chief Executive Officer, the President or the Secretary. Any such resignation shall be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation shall become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights, if any, of the Corporation under any contract with the resigning officer.

Section 5.5. Removal. Any officer may be removed from office at any time, either with or without cause, by the Board, or by any duly authorized committee thereof or any officer upon whom such power of removal may have been conferred by the Board.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 6.1. Execution of Corporate Instruments. The Board may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute, sign or endorse on behalf of the Corporation any corporate instrument or document, or to sign on behalf of the Corporation the corporate name without limitation, or to enter into contracts on behalf of the Corporation, except where otherwise provided by applicable law or the Bylaws, and such execution or signature shall be binding upon the Corporation.

(a) All checks and drafts drawn on banks or other depositories on funds to the credit of the Corporation or in special accounts of the Corporation shall be signed by such person or persons as the Board shall from time to time authorize so to do.

(b) Unless otherwise specifically determined by the Board or otherwise required by applicable law, the execution, signing or endorsement of any corporate instrument or document by or on behalf of the Corporation may be effected manually, by facsimile or (to the extent not prohibited by applicable law and subject to such policies and procedures as the Corporation may have in effect from time to time) by electronic signature.

(c) Unless authorized or ratified by the Board or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the Corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 6.2. Voting of Securities Owned by the Corporation. All stock and other securities of or interests in other corporations or entities owned or held by the Corporation for itself, or for other parties in any capacity, shall be voted, and all proxies and consents with respect thereto shall be executed, by the person authorized so to do by resolution of the Board, or, in the absence of such authorization, by the Chairperson of the Board, the Chief Executive Officer, or the President.

ARTICLE VII

SHARES OF STOCK

Section 7.1. Form and Execution of Certificates. The shares of the Corporation shall be represented by certificates, or shall be uncertificated if so provided by resolution or resolutions of the Board. Certificates for the shares of stock of the Corporation, if any, shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock in the Corporation represented by certificates shall be entitled to have a certificate signed by or in the name of the Corporation by any two authorized officers of the Corporation (including, without limitation, the Chairperson of the Board, the Chief Executive Officer, the President, the Treasurer, any Assistant Treasurer, the Secretary and any Assistant Secretary), certifying the number, and the class or series, of shares owned by such holder in the Corporation in certificated form. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he were such officer, transfer agent, or registrar at the date of issue.

Section 7.2. Lost Certificates. The Corporation may issue a new certificate or certificates or uncertificated shares in place of any certificate or certificates theretofore issued by the Corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The Corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner's legal representative, to give the Corporation a bond (or other adequate security) sufficient to indemnify the Corporation against any claim that may be made against the Corporation with respect to the certificate alleged to have been lost, stolen, or destroyed or the issuance of such new certificate(s) or uncertificated shares.

Section 7.3. Transfers.

(a) Transfers of record of shares of stock of the Corporation shall be made only upon its books by the holders thereof, in person or by attorney duly authorized, and, in the case of stock represented by certificate, upon the surrender of a properly endorsed certificate or certificates for a like number of shares.

(b) The Corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes or series of stock of the Corporation to restrict the transfer of shares of stock of the Corporation of any one or more classes or series owned by such stockholders in any manner not prohibited by the DGCL.

Section 7.4. Fixing Record Dates.

(a) In order that the Corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the Board may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board, and which record date shall, subject to applicable law, not be more than 60 nor less than ten days before the date of such meeting. If the Board so fixes a record date for determining the stockholders entitled to notice of any meeting of stockholders, such date shall also be the record date for determining the stockholders entitled to vote at such meeting, unless the Board determines, at the time it fixes the record date for determining the stockholders entitled to notice of such meeting, that a later date on or before the date of the meeting shall be the record date for determining the stockholders entitled to vote at such meeting. If no record date is fixed by the Board, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board may fix a new record date for determining the stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determining the stockholders entitled to vote in accordance with the provisions of this Section 7.4(a).

(b) In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board adopts the resolution relating to such action.

Section 7.5. Registered Stockholders. The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

Section 7.6. Additional Powers of the Board. In addition to, and without limiting, the powers set forth in the Bylaws, the Board shall have power and authority to make all such rules and regulations as it shall deem expedient concerning the issue, transfer, and registration of certificates for shares of stock of the Corporation, including the use of uncertificated shares of stock, subject to the provisions of the DGCL, other applicable law, the Certificate of Incorporation and the Bylaws. The Board may appoint and remove transfer agents and registrars of transfers, and may require all stock certificates to bear the signature of any such transfer agent and/or any such registrar of transfers.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 8.1. Execution of Other Securities. All bonds, debentures and other corporate securities of the Corporation, other than stock certificates (covered in Section 7.1), may be signed by the Chairperson of the Board, the Chief Executive Officer, or the President, or such other person as may be authorized by the Board; provided, however, that where any such bond, debenture or other corporate security shall be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by the Treasurer or an Assistant Treasurer of the Corporation or such other person as may be authorized by the Board, or bear imprinted thereon the facsimile signature of such person. In case any officer who shall have signed or attested any bond, debenture or other corporate security, or whose facsimile signature shall appear thereon or on any such interest coupon, shall have ceased to be such officer before the bond, debenture or other corporate security so signed or attested shall have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the Corporation and issued and delivered as though the person who signed the same or whose facsimile signature shall have been used thereon had not ceased to be such officer of the Corporation.

ARTICLE IX

DIVIDENDS

Section 9.1. Declaration of Dividends. Dividends upon the capital stock of the Corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board. Dividends may be paid in cash, in property, or in shares of capital stock or other securities of the Corporation, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 9.2. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the Corporation available for dividends such sum or sums as the Board from time to time, in its absolute discretion, determines proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the Corporation, or for such other purpose or purposes as the Board shall determine to be conducive to the interests of the Corporation, and the Board may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

Section 10.1. Fiscal Year. The fiscal year of the Corporation shall be fixed by resolution of the Board and may be changed by the Board.

ARTICLE XI

INDEMNIFICATION

Section 11.1. Indemnification of Directors, Officers, Employees and Other Agents.

(a) Directors and Officers. The Corporation shall indemnify to the fullest extent permitted by the DGCL as it presently exists or may hereafter be amended (but, in the case of any such amendment, only to the extent that such amendment permits the Corporation to provide broader indemnification rights than such law permitted the Corporation to provide prior to such amendment), any person who was or is made or is threatened to be made a party or is otherwise involved in a Proceeding, by reason of the fact that such person is or was a director officer of the Corporation, or while serving as a director or officer of the Corporation, is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, whether the basis of such Proceeding is alleged action in an official capacity as a director or officer or in any other capacity while serving as a director or officer, against all expense, liability and loss (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties and amounts paid in settlement) reasonably incurred or suffered by such person in connection therewith; provided, however, that the Corporation will not be required to indemnify or advance expenses to any director or officer in connection with any Proceeding (or part thereof) initiated by such person unless (i) the Proceeding (or part thereof) was authorized by the Board or (ii) the Proceeding (or part thereof) is initiated to enforce rights to indemnification or advancement of expenses as provided under subsection (d) of this Section 11.1 or is a compulsory counterclaim brought by such person.

(b) Employees and Other Agents. The Corporation shall have power to indemnify and advance expenses to its employees and other agents to the fullest extent permitted by the DGCL.

(c) Expenses. The Corporation shall advance to any current or former director or officer of the Corporation, or to any person, who while serving as a director or officer of the Corporation, is or was serving at the request of the Corporation as a director or officer of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, prior to the final disposition of the Proceeding, promptly following request therefor, all expenses incurred by such person in defending (or participating as a witness in) any Proceeding referred to in Section 11.1(a), or in connection with a Proceeding brought to establish or enforce a right to indemnification or advancement of expenses under subsection (d) of this Section 11.1, provided, however, that any advancement of expenses incurred by a current or former director or officer in such director's or officer's capacity as a director or officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) will be made only upon delivery to the Corporation of an undertaking, by or on behalf of such indemnitee, to repay all amounts so advanced if it is ultimately determined by final judicial decision from which there is no further right to appeal that such indemnitee is not entitled to be indemnified or entitled to advancement for such expenses under this Section 11.1 or otherwise.

(d) Enforcement. Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and officers under this Section 11.1 will be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the Corporation and the director or officer. Any right to indemnification or advancement of expenses granted by this Section 11.1 to a current or former director or officer will be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advancement of expenses is denied, in whole or in part, (ii) no disposition of a claim for indemnification is made within 90 days of request therefor, or (iii) no disposition of a claim for an advance is made within 30 days of request therefor. The claimant in such enforcement action, if successful in whole or in part, or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, will be entitled to be paid also the expense of prosecuting or defending the claim to the fullest extent permitted by the DGCL. In (i) any suit brought to enforce a right to indemnification hereunder (but not in a suit brought to enforce a right to an advancement of expenses) it shall be a defense that, and (ii) any suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the Corporation shall be entitled to recover such expenses upon a final adjudication that, the indemnitee has not met any applicable standard for indemnification set forth in the DGCL. Neither the failure of the Corporation (including its Board, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because such person has met the applicable standard of conduct set forth in the DGCL, nor an actual determination by the Corporation (including its Board, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, will be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct. In any suit brought by a current or former director or officer to enforce a right to indemnification or to an advancement of expenses hereunder, or brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the director or officer is not entitled to be indemnified, or to such advancement of expenses, under this Section 11.1 or otherwise is on the Corporation.

(e) Non-Exclusivity of Rights. The rights conferred on any person by this Section 11.1 are not exclusive of any other right that such person may have or hereafter acquire under any applicable law, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding office. The Corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL.

(f) Survival of Rights. The rights conferred on any person by this Section 11.1 will continue as to a person who has ceased to be a director or officer and will inure to the benefit of the heirs, executors and administrators of such a person.

(g) Insurance. To the fullest extent permitted by the DGCL, the Corporation may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this Section 11.1.

(h) Amendments. Any repeal or modification of this Section 11.1 is only prospective and does not affect the rights under this Bylaw in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any Proceeding against any current or former director or officer of the Corporation.

(i) Saving Clause. If this Section 11 or any portion hereof is invalidated on any ground by any court of competent jurisdiction, then the Corporation will nevertheless indemnify and advance expenses to each director and officer to the full extent not prohibited by any applicable portion of this Section 11 that has not been invalidated, or by any. If this Section 11 is invalid due to the application of the indemnification and advancement provisions of another jurisdiction, then the Corporation will indemnify and advance expenses to each director and officer to the full extent under applicable law.

(j) Certain Definitions. For the purposes of this Section 11, the following definitions apply:

- (i)** The term “**Proceeding**” is to be broadly construed and includes, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.
- (ii)** The term “**expenses**” is to be broadly construed and includes, without limitation, court costs, attorneys’ fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.
- (iii)** The term the “**Corporation**” includes, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger that, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, stands in the same position under the provisions of this Section 11 with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued.
- (iv)** References to “**finances**” include any excise taxes assessed on a person with respect to an employee benefit plan.

ARTICLE XII

NOTICES

Section 12.1. Notices.

(a) Notice to Stockholders. Notice to stockholders of stockholder meetings shall be given as provided in Section 3.4. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by applicable law, written notice to stockholders for purposes other than stockholder meetings may be sent by U.S. mail or courier service, facsimile or by electronic mail or other means of electronic transmission in accordance with Section 232 of the DGCL.

(b) Notice to Directors. Any notice required to be given to any director may be given by the method stated in subsection (a) or as otherwise provided in the Bylaws, with notice other than one that is delivered personally to be sent to such address or electronic mail address as such director shall have filed in writing with the Secretary, or, in the absence of such filing, to the last known address or electronic mail address of such director.

(c) Affidavit of Mailing. An affidavit of notice, executed by a duly authorized and competent employee of the Corporation or its transfer agent appointed with respect to the class of stock affected, or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) Methods of Notice. It shall not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(e) Notice to Person with Whom Communication is Unlawful. Whenever notice is required to be given, under applicable law or any provision of the Certificate of Incorporation or Bylaws, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting that shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the Corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(f) Notice to Stockholders Sharing an Address. Except as otherwise prohibited under the DGCL, any notice given under the provisions of the DGCL, the Certificate of Incorporation or the Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent shall have been deemed to have been given if such stockholder fails to object in writing to the Corporation within 60 days of having been given notice by the Corporation of its intention to send the single notice. Any consent shall be revocable by the stockholder by written notice to the Corporation.

(g) Waiver. Whenever notice is required to be given under any provision of the DGCL, the Certificate of Incorporation or the Bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders, directors or members of a committee of directors need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the Certificate of Incorporation or the Bylaws.

ARTICLE XIII

AMENDMENTS

Section 13.1. Amendments. Subject to the limitations set forth in Section 11.1(h) or the Certificate of Incorporation, the Board is expressly empowered to adopt, amend or repeal the Bylaws of the Corporation. The stockholders also shall have power to adopt, amend or repeal the Bylaws of the Corporation; provided, however, that, in addition to any vote of the holders of any class or series of stock of the Corporation required by applicable law or by the Certificate of Incorporation (including any certificate of designation relating to any series of Preferred Stock (as defined in the Certificate of Incorporation)), such action by stockholders shall require the affirmative vote of the holders of at least $66\frac{2}{3}\%$ of the voting power of all of the then-outstanding shares of the capital stock of the Corporation entitled to vote thereon, voting together as a single class.

NUMBER AB		SHARES
INCORPORATED UNDER THE LAWS OF THE STATE OF DELAWARE		CUSIP 04317A 10 7 SEE REVERSE FOR CERTAIN DEFINITIONS AND LEGENDS
This certifies that is the record holder of		
FULLY PAID AND NONASSESSABLE SHARES OF COMMON STOCK, \$0.0001 PAR VALUE PER SHARE, OF ARTIVA BIOTHERAPEUTICS, INC.		
transferable on the books of the Corporation in person or by duly authorized attorney upon surrender of this Certificate properly endorsed. This Certificate is not valid until countersigned by the Transfer Agent and registered by the Registrar.		
WITNESS the facsimile seal of the Corporation and the facsimile signatures of its duly authorized officers.		
Dated:	CHIEF EXECUTIVE OFFICER	SECRETARY
		COUNTERSIGNED AND REGISTERED BY: EDMUND TRUST COMPANY, LLC TRANSFER AGENT AND REGISTRAR
HERSCHEL B. KAYNOL		AUTHORIZED SIGNATURE

The Corporation shall furnish without charge to each stockholder who so requests a statement of the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock of the Corporation or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Such requests shall be made to the Corporation's Secretary at the principal office of the Corporation.

KEEP THIS CERTIFICATE IN A SAFE PLACE. IF IT IS LOST, STOLEN, OR DESTROYED THE CORPORATION WILL REQUIRE A BOND INDEMNITY AS A CONDITION TO THE ISSUANCE OF A REPLACEMENT CERTIFICATE.

The following abbreviations, when used in the inscription on the face of this certificate, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM - as tenants in common
TEN ENT - as tenants by the entireties
JT TEN - as joint tenants with right of survivorship and not as tenants in common
COM PROP - as community property

UNIF GIFT MIN ACT - Custodian
(Cust) (Minor)
under Uniform Gifts to Minors Act
(State)
UNIF TRF MIN ACT - Custodian (until age)
(Cust) (Minor)
under Uniform Transfers to Minors Act
(State)

Additional abbreviations may also be used though not in the above list.

FOR VALUE RECEIVED, _____ hereby sell(s), assign(s) and transfer(s) unto

PLEASE INSERT SOCIAL SECURITY OR OTHER IDENTIFYING NUMBER OF ASSIGNEE

(PLEASE PRINT OR TYPEWRITE NAME AND ADDRESS, INCLUDING ZIP CODE, OF ASSIGNEE)

_____ shares of the capital stock represented by within Certificate, and do hereby irrevocably constitute and appoint

_____ attorney-in-fact to transfer the said stock on the books of the within named Corporation with full power of the substitution in the premises.

Dated _____

X _____
X _____

Signature(s) Guaranteed:

NOTICE: THE SIGNATURE TO THIS ASSIGNMENT MUST CORRESPOND WITH THE NAME AS WRITTEN UPON THE FACE OF THE CERTIFICATE IN EVERY PARTICULAR, WITHOUT ALTERATION OR ENLARGEMENT OR ANY CHANGE WHATSOEVER.

By _____

THE SIGNATURE(S) SHOULD BE GUARANTEED BY AN ELIGIBLE GUARANTOR INSTITUTION, (BANKS, STOCKBROKERS, SAVINGS AND LOAN ASSOCIATIONS AND CREDIT UNIONS WITH MEMBERSHIP IN AN APPROVED SIGNATURE GUARANTEE MEDALLION PROGRAM), PURSUANT TO S.E.C. RULE 17Ad-15. GUARANTEES BY A NOTARY PUBLIC ARE NOT ACCEPTABLE. SIGNATURE GUARANTEES MUST NOT BE DATED.

AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT

THIS AMENDED AND RESTATED INVESTORS' RIGHTS AGREEMENT (this "**Agreement**"), is made as of February 22, 2021, by and among Artiva Biotherapeutics, Inc., a Delaware corporation (the "**Company**"), and each of the investors listed on **Schedule A** hereto, each of which is referred to in this Agreement as an "**Investor**."

RECITALS:

WHEREAS, the Company and certain of the Investors (the "**Prior Investors**") are parties to that certain Investors' Rights Agreement, dated as of June 25, 2020, by and among the Company and the Prior Investors (the "**Prior Agreement**");

WHEREAS, concurrently with the execution of this Agreement, the Company and certain of the Investors are purchasing shares of the Series B Preferred Stock (as defined below) pursuant to that certain Series B Preferred Stock Purchase Agreement (as may be amended from time to time, the "**Purchase Agreement**") of even date herewith;

WHEREAS, the obligations in the Purchase Agreement are conditioned upon the execution and delivery of this Agreement;

WHEREAS, the parties to the Prior Agreement desire to amend and restate the Prior Agreement and accept the rights and covenants hereof in lieu of their rights and covenants under the Prior Agreement; and

WHEREAS, in order to induce the Company to enter into the Purchase Agreement and to induce certain of the Investors to invest funds in the Company pursuant to the Purchase Agreement, the Investors and the Company hereby agree that this Agreement shall govern the rights of the Investors to cause the Company to register shares of Common Stock issuable to the Investors, to receive certain information from the Company, and to participate in future equity offerings by the Company, and shall govern certain other matters as set forth in this Agreement.

NOW, THEREFORE, in consideration of the foregoing premises and for certain other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions. For purposes of this Agreement:

1.1 "Affiliate" means, with respect to any specified Person, any other Person who, directly or indirectly, controls, is controlled by, or is under common control with such Person, including without limitation any general partner, managing member, officer, director or trustee of such Person, or any investment fund, venture capital fund or registered investment company now or hereafter existing that is controlled by one or more general partners, managing members or investment advisers of, or shares the same management company or investment adviser with, such Person, other than a portfolio company of such Person.

1.2 "Board of Directors" means the Board of Directors of the Company.

1.3 "Certificate of Incorporation" means the Company's Amended and Restated Certificate of Incorporation, as amended and/or restated from time to time.

1.4 “Common Stock” means shares of the Company’s Common Stock, par value \$0.0001 per share.

1.5 “Competitor” means a Person engaged, directly or indirectly (including through any partnership, limited liability company, corporation, joint venture or similar arrangement (whether now existing or formed hereafter)), in the development or commercialization of products that would compete with products developed or being developed by the Company, but shall not include (i) any financial investment firm or collective investment vehicle that, together with its Affiliates, holds less than 20% of the outstanding equity of any Competitor and does not, nor do any of its Affiliates, have a right to designate any members of the board of directors of any Competitor, or (ii) 5AM Ventures VI, L.P. (“**5AM**”), venBio Global Strategic Fund III, L.P. (“**venBio**”), RA Capital Healthcare Fund, L.P. (“**RA Healthcare**”), Blackwell Partners LLC – Series A (“**Blackwell**”), RA Capital Nexus Fund, L.P. (“**RA Nexus**,” and, collectively, together with RA Healthcare and Blackwell, “**RA Capital**”), Medivate-DAvalue Fund No.03 (“**Medivate**”), Venrock Healthcare Capital Partners EG, L.P. (“**Venrock**”), RTW Master Fund, Ltd. (“**RTW Master**”), RTW Innovation Master Fund, Ltd. (“**RTW Innovation**”), RTW Venture Fund Limited (“**RTW Venture**,” and collectively, together with RTW Master and RTW Innovation, “**RTW Fund**”), Citadel Multi-Strategy Equities Master Fund Ltd. (“**Surveyor**”), Franklin Strategic Series – Franklin Biotechnology Discovery Fund (“**Franklin Strategic**”), Franklin Templeton Investment Funds – Franklin Biotechnology Discovery Fund (together with Franklin Strategic, “**Franklin Templeton**”), Cormorant Private Equity Fund III, LP (“**Cormorant Private**”), Cormorant Global Healthcare Master Fund, LP (“**Cormorant Global**”) and CRMA SPV, L.P. (“**CRMA**,” and together with Cormorant Private and Cormorant Global, the “**Cormorant Funds**”), SMALLCAP World Fund, Inc. (together with Capital Research Management Company, “**Capital Group**”) and Wellington Investor or any of their respective Affiliates.

1.6 “Damages” means any loss, damage, claim or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, claim or liability (or any action in respect thereof) arises out of or is based upon: (i) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto; (ii) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (iii) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

1.7 “Derivative Securities” means any securities or rights convertible into, or exercisable or exchangeable for (in each case, directly or indirectly), Common Stock, including options and warrants.

1.8 “Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

1.9 “Excluded Registration” means (i) a registration relating to the sale or grant of securities to employees of the Company or a subsidiary pursuant to a stock option, stock purchase, equity incentive or similar plan; (ii) a registration relating to an SEC Rule 145 transaction; (iii) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (iv) a registration in which the only Common Stock being registered is Common Stock issuable upon conversion of debt securities that are also being registered.

1.10 “FOIA Party” means a Person that, in the reasonable determination of the Board of Directors, may be subject to, and thereby required to disclose non-public information furnished by or relating to the Company under, the Freedom of Information Act, 5 U.S.C. 552 (“**FOIA**”), any state public records access law, any state or other jurisdiction’s laws similar in intent or effect to FOIA, or any other similar statutory or regulatory requirement.

1.11 “Form S-1” means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

1.12 “Form S-3” means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits forward incorporation of substantial information by reference to other documents filed by the Company with the SEC.

1.13 “GAAP” means generally accepted accounting principles in the United States as in effect from time to time.

1.14 “Holder” means any holder of Registrable Securities who is a party to this Agreement.

1.15 “Immediate Family Member” means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, domestic partner, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including, adoptive relationships, or any life partner or other member of the same household covered under the applicable domestic relations statute, of a natural person referred to herein.

1.16 “Initiating Holders” means, collectively, Holders who properly initiate a registration request under this Agreement.

1.17 “IPO” means the Company’s first underwritten public offering of its Common Stock under the Securities Act.

1.18 “Key Employee” means Fred Aslan, M.D., Thomas J. Farrell, Peter Flynn, Ph.D. and Jason B. Litten, M.D.

1.19 “Major Investor” means any Investor that, individually or together with such Investor’s Affiliates, holds at least 450,000 shares of Registrable Securities (as adjusted for any stock split, stock dividend, combination, or other recapitalization or reclassification effected after the date hereof).

1.20 “New Securities” means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

1.21 “Person” means any individual, corporation, partnership, trust, limited liability company, association or other entity.

1.22 “Preferred Director” means any director of the Company that the holders of record of one or more series of Preferred Stock are entitled to elect, exclusively and as a separate class, pursuant to the Certificate of Incorporation.

1.23 “Preferred Stock” means, collectively, shares of the Series A Preferred Stock and shares of the Series B Preferred Stock.

1.24 “Registrable Securities” means (i) the Common Stock issuable or issued upon conversion of the Preferred Stock; and (ii) any Common Stock issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the shares referenced in clause (i) above; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 6.1, and excluding for purposes of Section 2 any shares for which registration rights have terminated pursuant to Section 2.13 of this Agreement. For the avoidance of doubt, Registrable Securities shall exclude any outstanding shares of Common Stock except those referenced in clauses (i) and (ii) above.

1.25 “Registrable Securities then outstanding” means the number of shares determined by adding the number of shares of outstanding Common Stock that are Registrable Securities and the number of shares of Common Stock issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

1.26 “Restricted Securities” means the securities of the Company required to be notated with the legend set forth in Section 2.12(b) hereof.

1.27 “SEC” means the U.S. Securities and Exchange Commission.

1.28 “SEC Rule 144” means Rule 144 promulgated by the SEC under the Securities Act.

1.29 “SEC Rule 145” means Rule 145 promulgated by the SEC under the Securities Act.

1.30 “Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

1.31 “Selling Expenses” means all underwriting discounts, selling commissions, and stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel (as defined below) borne and paid by the Company as provided in Section 2.6.

1.32 “Series A Preferred Stock” means shares of the Company’s Series A Preferred Stock, par value \$0.0001 per share.

1.33 “Series B Preferred Stock” means shares of the Company’s Series B Preferred Stock, par value \$0.0001 per share.

1.34 “Voting Agreement” means that certain Amended and Restated Voting Agreement of even date herewith among the Company, the Investors and the other parties named therein

1.35 “Wellington Investor” means Wellington Biomedical Innovation Master Investors (Cayman) I L.P., or any investors or permitted transferees of Registrable Securities held by investors that are advisory or subadvisory clients of Wellington Biomedical Innovation Master Investors (Cayman) I L.P. and/or Wellington Management Company LLP.

2. Registration Rights. The Company covenants and agrees as follows:

2.1 Demand Registration.

(a) Form S-1 Demand. If at any time after the earlier of (i) five years after the date of this Agreement or (ii) 180 days after the effective date of the registration statement for the IPO, the Company receives a request from Holders of a majority of the Registrable Securities then outstanding that the Company file a Form S-1 registration statement with respect to the outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$10 million, then the Company shall (x) within 10 days after the date such request is given, give notice thereof (the “**Demand Notice**”) to all Holders other than the Initiating Holders; and (y) as soon as practicable, and in any event within 60 days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within 20 days of the date the Demand Notice is given, and in each case, subject to the limitations of Sections 2.1(c) and 2.3.

(b) Form S-3 Demand. If at any time when it is eligible to use a Form S-3 registration statement, the Company receives a request from Holders of at least 20% of the Registrable Securities then outstanding that the Company file a Form S-3 registration statement with respect to the outstanding Registrable Securities of such Holders having an anticipated aggregate offering price, net of Selling Expenses, of at least \$5 million, then the Company shall (i) within 10 days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (ii) as soon as practicable, and in any event within 45 days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within 20 days of the date the Demand Notice is given, and in each case, subject to the limitations of Sections 2.1(c) and 2.3.

(c) Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Section 2.1 a certificate signed by the Company’s chief executive officer stating that in the good faith judgment of the Board of Directors it would be materially detrimental to the Company and its stockholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (i) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than 60 days after the request of the Initiating Holders is given; *provided, however*, that the Company may not invoke this right more than once in any 12 month period; and *provided, further*, that the Company shall not register any securities for its own account or that of any other stockholder during such 60 days.

(d) The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(a) (i) during the period that is 60 days before the Company’s good faith estimate of the date of filing of, and ending on a date that is 180 days after the effective date of, a Company-initiated registration, *provided* that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; (ii) after the Company has effected two registrations pursuant to Section 2.1(a); or (iii) if the Initiating Holders propose

to dispose of shares of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2.1(b). The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1(b) (i) during the period that is 30 days before the Company's good faith estimate of the date of filing of, and ending on a date that is 90 days after the effective date of, a Company-initiated registration, *provided* that the Company is actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective; or (ii) if the Company has effected two registrations pursuant to Section 2.1(b) within the 12 month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Section 2.1(d) until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one demand registration statement pursuant to Section 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Section 2.1(d); *provided*, that if such withdrawal is during a period the Company has deferred taking action pursuant to Section 2.1(c), then the Initiating Holders may withdraw their request for registration and such registration will not be counted as "effected" for purposes of this Section 2.1(d).

2.2 Company Registration. If the Company proposes to register (including, for this purpose, a registration effected by the Company for stockholders other than the Holders) any of its Common Stock under the Securities Act in connection with the public offering of such securities solely for cash (other than in an Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within 20 days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3 Underwriting Requirements.

(a) If, pursuant to Section 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Company and shall be reasonably acceptable to a majority in interest of the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 2.4(e)) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of shares to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; *provided, however*, that the number of Registrable Securities held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares.

(b) In connection with any offering involving an underwriting of shares of the Company's capital stock pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters, and then only in such quantity as the underwriters in their sole discretion determine will not jeopardize the success of the offering by the Company. If the total number of securities, including Registrable Securities, requested by stockholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering. If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of shares in accordance with the above provisions, the Company or the underwriters may round the number of shares allocated to any Holder to the nearest 100 shares. Notwithstanding the foregoing, in no event shall (i) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering, or (ii) the number of Registrable Securities included in the offering be reduced below 33% of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other stockholder's securities are included in such offering. For purposes of the provision in this Section 2.3(b) concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned by all Persons included in such "selling Holder," as defined in this sentence.

2.4 Obligations of the Company. Whenever required under this Section 2 to effect the registration of any Registrable Securities, the Company shall use commercially reasonable efforts to:

(a) prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its commercially reasonable efforts to cause such registration statement to become effective and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for a period of up to 120 days or, if earlier, until the distribution contemplated in the registration statement has been completed; *provided, however*, that such 120 day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Stock (or other securities) of the Company, from selling any securities included in such registration;

(b) prepare and file with the SEC such amendments and supplements to such registration statement, and the prospectus used in connection with such registration statement, as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

(c) furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

(d) register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; *provided* that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

(e) in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

(f) cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

(g) provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

(h) promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

(i) notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus forming a part of such registration statement has been filed; and

(j) after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus.

In addition, the Company shall ensure that, at all times after any registration statement covering a public offering of securities of the Company under the Securities Act shall have become effective, its insider trading policy shall provide that the Company's directors may implement a trading program under Rule 10b5-1 of the Exchange Act.

2.5 Furnish Information. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 Expenses of Registration. All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to Section 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements, not to exceed \$30,000, of one counsel for the selling Holders ("**Selling Holder Counsel**"), shall be borne and paid by the Company; *provided, however*, that the

Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one registration pursuant to Sections 2.1(a) or 2.1(b), as the case may be; provided further that if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Subsections 2.1(a) or 2.1(b). All Selling Expenses relating to Registrable Securities registered pursuant to this Section 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 Delay of Registration. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 2.

2.8 Indemnification. If any Registrable Securities are included in a registration statement under this Section 2:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; *provided, however*, that the indemnity agreement contained in this Section 2.8(a) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, nor shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

(b) To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; *provided, however*, that the indemnity agreement contained in this Section 2.8(b) shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld; and *provided further* that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Section 2.8(b) and 2.8(d) exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; *provided, however*, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, to the extent that such failure materially prejudices the indemnifying party's ability to defend such action. The failure to give notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 2.8.

(d) To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either: (i) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (ii) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; *provided, however*, that, in any such case (x) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (y) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and *provided further* that in no event shall a Holder's liability pursuant to this Section 2.8(d), when combined with the amounts paid or payable by such Holder pursuant to Section 2.8(b), exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of willful misconduct or fraud by such Holder.

(e) Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control; *provided, however*, that the foregoing provisions shall control as to any matter provided for or addressed thereby that is not provided for or addressed by the underwriting agreement.

(f) Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this Section 2, and otherwise shall survive the termination of this Agreement or any provision(s) of this Agreement.

2.9 Reports Under Exchange Act. With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

(a) make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

(b) use commercially reasonable efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

(c) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after 90 days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); and (ii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 Limitations on Subsequent Registration Rights. From and after the date of this Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the Registrable Securities then outstanding, enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder to include such securities in any registration unless, under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of such securities will not reduce the number of the Registrable Securities of the Holders that are included; *provided* that this limitation shall not apply to Registrable Securities acquired by any additional Investor that becomes a party to this Agreement in accordance with Section 6.9.

2.11 “Market Stand-off” Agreement. Each Holder hereby agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the IPO, and ending on the date specified by the Company and the managing underwriter (such period not to exceed 180 days), (i) lend; offer; pledge; sell; contract to sell; sell any option or contract to purchase; purchase any option or contract to sell; grant any option, right, or warrant to purchase; or otherwise transfer or dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Stock held immediately before the effective date of the registration statement for the IPO, or (ii) enter into any

swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of Common Stock or other securities, in cash, or otherwise. Notwithstanding the foregoing, each Holder shall have the right to adopt 10b5-1 plans during said period so long as no sales occur prior to the expiration of said period. The foregoing provisions of this Section 2.11 shall apply only to the IPO, shall not apply to transactions (including, without limitation, any swap, hedge or similar agreement or arrangement) or announcements, in each case, relating to securities acquired in the IPO or securities acquired in open market or other transactions from and after the IPO or that otherwise do not involve or relate to shares of Common Stock owned by a Holder prior to the IPO, shall not apply to the sale of any shares to an underwriter pursuant to an underwriting agreement, or the transfer of any shares to any trust for the direct or indirect benefit of the Holder or the Immediate Family Member of the Holder, *provided* that the trustee of the trust agrees to be bound in writing by the restrictions set forth herein, and *provided further* that any such transfer shall not involve a disposition for value, and shall be applicable to the Holders only if all officers, directors, and stockholders individually owning more than 1% of the Company's outstanding Common Stock (after giving effect to conversion into Common Stock of all outstanding Preferred Stock) are subject to the same restrictions. The underwriters in connection with such registration are intended third-party beneficiaries of this Section 2.11 and shall have the right, power and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Section 2.11 or that are necessary to give further effect thereto. Any discretionary waiver or termination of the restrictions of any or all of such agreements by the Company or the underwriters shall apply pro rata to all Holders that are subject to such agreements, based on the number of shares subject to such agreements, except that, notwithstanding the foregoing, the Company and the underwriters may, in their sole discretion, waive or terminate these restrictions with respect to up to 1% of the shares of Common Stock subject to these restrictions.

2.12 Restrictions on Transfer.

(a) The Preferred Stock and the Registrable Securities shall not be sold, pledged, or otherwise transferred, and the Company shall not recognize and shall issue stop-transfer instructions to its transfer agent with respect to any such sale, pledge, or transfer, except upon the conditions specified in this Agreement, which conditions are intended to ensure compliance with the provisions of the Securities Act. A transferring Holder will cause any proposed purchaser, pledgee, or transferee of the Preferred Stock and the Registrable Securities held by such Holder to agree to take and hold such securities subject to the provisions and upon the conditions specified in this Agreement. Notwithstanding the foregoing, the Company shall not require any transferee of shares pursuant to an effective registration statement or, following the IPO, SEC Rule 144, in each case, to be bound by the terms of this Agreement.

(b) Each certificate, instrument, or book entry representing (i) the Preferred Stock, (ii) the Registrable Securities, and (iii) any other securities issued in respect of the securities referenced in clauses (i) and (ii), upon any stock split, stock dividend, recapitalization, merger, consolidation, or similar event, shall (unless otherwise permitted by the provisions of Section 2.12(c)) be notated with a legend substantially in the following form:

THE SECURITIES REPRESENTED HEREBY HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED. SUCH SHARES MAY NOT BE SOLD, PLEDGED, OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR A VALID EXEMPTION FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF SAID ACT. THE SECURITIES REPRESENTED HEREBY MAY BE TRANSFERRED ONLY IN ACCORDANCE WITH THE TERMS OF AN INVESTORS' RIGHTS AGREEMENT BETWEEN THE COMPANY AND THE STOCKHOLDER, A COPY OF WHICH IS ON FILE WITH THE SECRETARY OF THE COMPANY.

The Holders consent to the Company making a notation in its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer set forth in this Section 2.12.

(c) The holder of such Restricted Securities, by acceptance of ownership thereof, agrees to comply in all respects with the provisions of this Section 2. Before any proposed sale, pledge, or transfer of any Restricted Securities, unless there is in effect a registration statement under the Securities Act covering the proposed transaction, the Holder thereof shall give notice to the Company of such Holder's intention to effect such sale, pledge, or transfer, provided that no such notice shall be required if the intended sale, pledge or transfer complies with SEC Rule 144. Each such notice shall describe the manner and circumstances of the proposed sale, pledge, or transfer in sufficient detail and, if reasonably requested by the Company, shall be accompanied at such Holder's expense by either (i) a written opinion of legal counsel who shall, and whose legal opinion shall, be reasonably satisfactory to the Company, addressed to the Company, to the effect that the proposed transaction may be effected without registration under the Securities Act; (ii) a "no action" letter from the SEC to the effect that the proposed sale, pledge, or transfer of such Restricted Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto; or (iii) any other evidence reasonably satisfactory to counsel to the Company to the effect that the proposed sale, pledge, or transfer of the Restricted Securities may be effected without registration under the Securities Act, whereupon the Holder of such Restricted Securities shall be entitled to sell, pledge, or transfer such Restricted Securities in accordance with the terms of the notice given by the Holder to the Company. The Company will not require such a notice, legal opinion or "no action" letter (x) in any transaction in compliance with SEC Rule 144; or (y) in any transaction in which such Holder distributes Restricted Securities to an Affiliate of such Holder for no consideration; *provided* that with respect to transfers under the foregoing clause (y) each transferee agrees in writing to be subject to the terms of this Section 2.12. Each certificate, instrument, or book entry representing the Restricted Securities transferred as above provided shall be notated with, except if such transfer is made pursuant to SEC Rule 144, the appropriate restrictive legend set forth in Section 2.12(b), except that such certificate instrument, or book entry shall not be notated with such restrictive legend if, in the opinion of counsel for such Holder and the Company, such legend is not required in order to establish compliance with any provisions of the Securities Act.

2.13 Termination of Registration Rights. The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Sections 2.1 or 2.2 shall terminate upon the earliest to occur of:

- (a) the closing of a Deemed Liquidation Event, as such term is defined in the Certificate of Incorporation;
- (b) such time after consummation of the IPO as Rule 144 or another similar exemption under the Securities Act is available for the sale of all of such Holder's shares without limitation during a three-month period without registration;
- (c) the fifth anniversary of the IPO.

3. Information and Observer Rights.

3.1 Delivery of Financial Statements. The Company shall deliver to each Major Investor, *provided* that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company:

(a) as soon as practicable, but in any event within 180 days after the end of each fiscal year of the Company (i) a balance sheet as of the end of such year, (ii) statements of income and of cash flows for such year, and (iii) a statement of stockholders' equity as of the end of such year, all such financial statements audited and certified by independent public accountants of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within 45 days after the end of each of the first three quarters of each fiscal year of the Company and within 90 days after the end of the fourth quarter of each fiscal year of the Company, unaudited statements of income and cash flows for such fiscal quarter, and an unaudited balance sheet and a statement of stockholders' equity as of the end of such fiscal quarter, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments; and (ii) not contain all notes thereto that may be required in accordance with GAAP);

(c) as soon as practicable, but in any event within 45 days after the end of each quarter of each fiscal year of the Company, a statement showing the number of shares of each class and series of capital stock and securities convertible into or exercisable for shares of capital stock outstanding at the end of the period, the Common Stock issuable upon conversion or exercise of any outstanding securities convertible or exercisable for Common Stock and the exchange ratio or exercise price applicable thereto, and the number of shares of issued stock options and stock options not yet issued but reserved for issuance, if any, all in sufficient detail as to permit the Major Investors to calculate their respective percentage equity ownership in the Company, and certified by the chief financial officer or chief executive officer of the Company as being true, complete, and correct;

(d) as soon as practicable, but in any event within 30 days of the end of each month, an unaudited income statement and statement of cash flows for such month, and an unaudited balance sheet and statement of stockholders' equity as of the end of such month, all prepared in accordance with GAAP (except that such financial statements may (i) be subject to normal year-end audit adjustments and (ii) not contain all notes thereto that may be required in accordance with GAAP); and

(e) as soon as practicable, but in any event 30 days before the end of each fiscal year, a budget for the next fiscal year, prepared on a monthly basis, including balance sheets, income statements, and statements of cash flow for such months and, promptly after prepared, any other budgets or revised budgets prepared by the Company.

If, for any period, the Company has any subsidiary whose accounts are consolidated with those of the Company, then in respect of such period the financial statements delivered pursuant to the foregoing sections shall be the consolidated and consolidating financial statements of the Company and all such consolidated subsidiaries.

Notwithstanding anything else in this Section 3.1 to the contrary, the Company may cease providing the information set forth in this Section 3.1 during the period starting with the date 60 days before the Company's good-faith estimate of the date of filing of a registration statement if it reasonably concludes it must do so to comply with the SEC rules applicable to such registration statement and related offering; *provided* that the Company's covenants under this Section 3.1 shall be reinstated at such time as the Company is no longer actively employing its commercially reasonable efforts to cause such registration statement to become effective.

3.2 Inspection. The Company shall permit each Major Investor, *provided* that the Board of Directors has not reasonably determined that such Major Investor is a Competitor of the Company, at such Major Investor's expense, to visit and inspect the Company's properties; examine its books of account and records; and discuss the Company's affairs, finances, and accounts with its officers, during normal business hours of the Company as may be reasonably requested by the Major Investor; *provided, however*, that the Company shall not be obligated pursuant to this Section 3.2 to provide access to any information that it reasonably and in good faith considers to be a trade secret or confidential information (unless covered by an enforceable confidentiality agreement, in form acceptable to the Company) or the disclosure of which would adversely affect the attorney-client privilege between the Company and its counsel.

3.3 Observer Rights. With respect to each of 5AM, venBio, RA Capital, Green Cross Holdings Corporation and Venrock, as long as such Investor is entitled to designate a member of the Board of Directors pursuant to the Voting Agreement, such Investor shall be entitled to designate an individual to attend all meetings of the Board of Directors in a nonvoting observer capacity (each, a "**Board Observer**") and, in this respect, the Company shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its directors; *provided*, however, that such representative shall agree to hold in confidence and trust all information so provided; and *provided further*, that the Company reserves the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could adversely affect the attorney-client privilege between the Company and its counsel or result in disclosure of trade secrets or a conflict of interest, or if such Investor or its representative is a Competitor of the Company.

3.4 Termination of Information and Observer Rights. The covenants set forth in Sections 3.1, 3.2 and 3.3 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, or (ii) upon the closing of a Deemed Liquidation Event, as such term is defined in the Certificate of Incorporation, whichever event occurs first.

3.5 Confidentiality. Each Investor agrees that such Investor will keep confidential and will not disclose, divulge, or use for any purpose (other than to monitor its investment in the Company) any confidential information obtained from the Company pursuant to the terms of Sections 3.1, 3.2 and 3.3 of this Agreement or notice of the Company's intention to file a registration statement, unless such confidential information (a) is known or becomes known to the public in general (other than as a result of a breach of this Section 3.5 by such Investor), (b) is or has been independently developed or conceived by such Investor or its agents without use of the Company's confidential information, or (c) is or has been made known or disclosed to such Investor by a third party without a breach of any obligation of confidentiality such third party may have to the Company; *provided, however*, that an Investor may disclose confidential information (i) to its attorneys, accountants, consultants, and other professionals to the extent necessary to obtain their services in connection with monitoring its investment in the Company; (ii) to any prospective purchaser of any Registrable Securities from such Investor, if such prospective purchaser agrees to be bound by the provisions of this Section 3.4, *provided* that the Board of Directors has not reasonably determined that such prospective purchaser is a Competitor of the Company; (iii) to any existing or prospective Affiliate, partner, (or partner of a partner), limited partner, member, stockholder, or wholly owned subsidiary of such Investor in the ordinary course of business, *provided* that such Investor informs such Person that such information is confidential and directs such Person to maintain the confidentiality of such information; (iv) to the extent required in connection with any routine or periodic examination or similar process by any regulatory or self-regulatory body or authority not specifically directed at the Company or the confidential information obtained from the Company pursuant to the terms of the Agreement, including, without limitation, quarterly or annual reports; or (v) as may otherwise be required by law, regulation, rule, court order or subpoena, *provided* that, except with respect to clause (iv), such Investor promptly notifies the Company of such disclosure and takes reasonable steps to minimize the extent of any such required disclosure.

4. Rights to Future Stock Issuances.

4.1 Right of First Offer. Subject to the terms and conditions of this Section 4.1 and applicable securities laws, if the Company proposes to offer or sell any New Securities, the Company shall first offer such New Securities to each Major Investor. A Major Investor shall be entitled to apportion the right of first offer hereby granted to it in such proportions as it deems appropriate, among (i) itself, (ii) its Affiliates and (iii) its beneficial interest holders, such as limited partners, members or any other Person having “beneficial ownership,” as such term is defined in Rule 13d-3 promulgated under the Exchange Act, of such Major Investor (“**Investor Beneficial Owners**”); *provided* that each such Affiliate or Investor Beneficial Owner (x) is not a Competitor or FOIA Party, unless such party’s purchase of New Securities is otherwise consented to by the Board of Directors, (y) agrees to enter into this Agreement and each of the Voting Agreement and the Amended and Restated Right of First Refusal and Co-Sale Agreement of even date herewith among the Company, the Investors and the other parties named therein, as an “**Investor**” under each such agreement (*provided* that any Competitor or FOIA Party shall not be entitled to any rights as a Major Investor under Sections 3.1, 3.2 and 4.1 hereof), and (z) agrees to purchase at least such number of New Securities as are allocable hereunder to the Major Investor holding the fewest number of Preferred Stock and any other Derivative Securities.

(a) The Company shall give notice (the “**Offer Notice**”) to each Major Investor, stating (i) its bona fide intention to offer such New Securities, (ii) the number of such New Securities to be offered, and (iii) the price and terms, if any, upon which it proposes to offer such New Securities.

(b) By notification to the Company within 20 days after the Offer Notice is given, each Major Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to that portion of such New Securities which equals the proportion that the Common Stock then held by such Major Investor (including all shares of Common Stock then issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held by such Major Investor) bears to the total Common Stock of the Company then outstanding (assuming full conversion and/or exercise, as applicable, of all shares of Preferred Stock and any other Derivative Securities then outstanding). At the expiration of such 20 day period, the Company shall promptly notify each Major Investor that elects to purchase or acquire all the shares available to it (each, a “**Fully Exercising Investor**”) of any other Major Investor’s failure to do likewise. During the 10 day period commencing after the Company has given such notice, each Fully Exercising Investor may, by giving notice to the Company, elect to purchase or acquire, in addition to the number of shares specified above, up to that portion of the New Securities for which Major Investors were entitled to subscribe but that were not subscribed for by the Major Investors which is equal to the proportion that the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of Preferred Stock and any other Derivative Securities then held, by such Fully Exercising Investor bears to the Common Stock issued and held, or issuable (directly or indirectly) upon conversion and/or exercise, as applicable, of the Preferred Stock and any other Derivative Securities then held, by all Fully Exercising Investors who wish to purchase such unsubscribed shares. The closing of any sale pursuant to this Section 4.1(b) shall occur within the later of 90 days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Section 4.1(c).

(c) If all New Securities referred to in the Offer Notice are not elected to be purchased or acquired as provided in Section 4.1(b), the Company may, during the 90 day period following the expiration of the periods provided in Section 4.1(b), offer and sell the remaining unsubscribed portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within 30 days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Major Investors in accordance with this Section 4.1.

(d) The right of first offer in this Section 4.1 shall not be applicable to: (i) Exempted Securities (as defined in the Certificate of Incorporation); (ii) shares of Common Stock issued in the IPO; and (iii) the issuance of the shares of Series B Preferred Stock pursuant to the Purchase Agreement.

(e) Notwithstanding any provision hereof to the contrary, in lieu of complying with the provisions of this Section 4.1, the Company may elect to give notice to the Major Investors within 30 days after the issuance of New Securities. Such notice shall describe the type, price, and terms of the New Securities. Each Major Investor shall have 20 days from the date notice is given to elect to purchase up to the number of New Securities that would, if purchased by such Major Investor, maintain such Major Investor's percentage-ownership position, calculated as set forth in Section 4.1(b) before giving effect to the issuance of such New Securities.

4.2 Termination. The covenants set forth in Section 4.1 shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, or (ii) upon the closing of a Deemed Liquidation Event, as such term is defined in the Certificate of Incorporation, whichever event occurs first.

5. Additional Covenants.

5.1 Insurance. The Company shall obtain, within 90 days of the date hereof, from financially sound and reputable insurers Directors and Officers liability insurance and term "key-person" insurance on Fred Aslan, M.D., in an amount and on terms and conditions satisfactory to the Board of Directors, and will use commercially reasonable efforts to cause such insurance policies for Fred Aslan, M.D. and the Company's existing Directors and Officers liability insurance and term "key-person" insurance on Thomas J. Farrell to be maintained until such time as the Board of Directors determines that such insurance should be discontinued. The key-person policy shall name the Company as loss payee, and neither policy shall be cancelable by the Company without prior approval by the Board of Directors. Notwithstanding any other provision of this Section 5.1 to the contrary, for so long as a Preferred Director is serving on the Board of Directors, the Company shall not cease to maintain a Directors and Officers liability insurance policy in an amount of at least \$3 million unless approved by each of the Preferred Directors then serving on the Board, and the Company shall annually, within 120 days after the end of each fiscal year of the Company, deliver to the holders of Preferred Stock a certification that such a Directors and Officers liability insurance policy remains in effect.

5.2 Employee Agreements. The Company will cause each Person now or hereafter employed by it or by any subsidiary (or engaged by the Company or any subsidiary as a consultant/independent contractor) with access to confidential information and/or trade secrets to enter into a nondisclosure and proprietary rights assignment agreement. Each Key Employee shall have entered into a one year non-solicitation agreement, substantially in the form approved by the Board of Directors prior to the date of this Agreement. Immediately prior to the Closing (as defined in the Purchase Agreement), the Company shall increase the allocable shares of Common Stock in the stock option pool to 5,889,537.

5.3 Employee Stock. Unless otherwise approved by the Board of Directors, including at least two Preferred Directors, all future employees and consultants of the Company who purchase, receive options to purchase, or receive awards of shares of the Company's capital stock after the date hereof shall be required to execute restricted stock or option agreements, as applicable, providing for (i) vesting of shares over a four year period, with the first 25% of such shares vesting following 12 months of continued employment or service, and the remaining shares vesting in equal monthly installments over the following 36 months, and (ii) a market stand-off provision substantially similar to that in Section 2.11. Without the prior approval by the Board of Directors, the Company shall not amend, modify, terminate, waive or otherwise alter, in whole or in part, any stock purchase, stock restriction or option agreement with any existing employee or service provider if such amendment would cause it to be inconsistent with this Section 5.3. In addition, unless otherwise approved by the Board of Directors, the Company shall retain (and not waive) a "right of first refusal" on employee transfers until the IPO and shall have the right to repurchase unvested shares at cost upon termination of employment of a holder of restricted stock.

5.4 Matters Requiring Preferred Director Approval. So long as the holders of Preferred Stock are entitled to elect at least two Preferred Directors, the Company hereby covenants and agrees with each of the Investors that it shall not, without approval of the Board of Directors, which approval must include the affirmative vote of at least two of the Preferred Directors:

(a) make, or permit any subsidiary to make, any loan or advance to, or own any stock or other securities of, any subsidiary or other corporation, partnership, or other entity unless it is wholly owned by the Company;

(b) make, or permit any subsidiary to make, any loan or advance to any Person, including, without limitation, any employee or director of the Company or any subsidiary, except advances and similar expenditures in the ordinary course of business or under the terms of an employee stock or option plan approved by the Board of Directors;

(c) guarantee, directly or indirectly, or permit any subsidiary to guarantee, directly or indirectly, any indebtedness except for trade accounts of the Company or any subsidiary arising in the ordinary course of business;

(d) make any investment inconsistent with any investment policy approved by the Board of Directors;

(e) incur any aggregate indebtedness in excess of \$250,000 that is not already included in a budget approved by the Board of Directors, other than trade credit incurred in the ordinary course of business;

(f) otherwise enter into or be a party to any transaction with any director, officer, or employee of the Company or any "associate" (as defined in Rule 12b-2 promulgated under the Exchange Act) of any such Person, including without limitation any "management bonus" or similar plan providing payments to employees in connection with a Deemed Liquidation Event, as such term is defined in the Certificate of Incorporation, except for transactions contemplated by this Agreement and the Purchase Agreement; transactions resulting in payments to or by the Company in an aggregate amount less than \$60,000 per year; or transactions made in the ordinary course of business and pursuant to reasonable requirements of the Company's business and upon fair and reasonable terms that are approved by a majority of the Board of Directors;

(g) hire, terminate, or change the compensation of the executive officers, including approving any option grants or stock awards to executive officers;

(h) change the principal business of the Company, enter new lines of business, or exit the current line of business;

(i) sell, assign, license, pledge, or encumber material technology or intellectual property, other than licenses granted in the ordinary course of business; or

(j) enter into any corporate strategic relationship involving the payment, contribution, or assignment by the Company or to the Company of money or assets greater than \$100,000.

5.5 Board Matters. Unless otherwise determined by the vote of a majority of the directors then in office, the Board of Directors shall meet at least quarterly in accordance with an agreed-upon schedule. The Company shall reimburse the non-employee directors and each Board Observer for all reasonable out-of-pocket travel expenses incurred (consistent with the Company's travel policy) in connection with attending meetings of the Board of Directors or other meetings or events attended on behalf of the Company or at the Company's request. The Preferred Directors shall constitute a majority of each of the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee, upon their formation.

5.6 Successor Indemnification. If the Company or any of its successors or assignees consolidates with or merges into any other Person and is not the continuing or surviving corporation or entity of such consolidation or merger, then to the extent necessary, proper provision shall be made so that the successors and assignees of the Company assume the obligations of the Company with respect to indemnification of members of the Board of Directors as in effect immediately before such transaction, whether such obligations are contained in the Company's Bylaws, as amended (the "Bylaws"), the Certificate of Incorporation, or elsewhere, as the case may be.

5.7 Indemnification Matters. The Company hereby acknowledges that one or more of the directors nominated to serve on the Board of Directors by the Investors (each an "Investor Director") may have certain rights to indemnification, advancement of expenses and/or insurance provided by one or more of the Investors and certain of their Affiliates (collectively, the "Investor Indemnitors"). The Company hereby agrees (a) that it is the indemnitor of first resort (*i.e.*, its obligations to any such Investor Director are primary and any obligation of the Investor Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by such Investor Director are secondary), (b) that it shall be required to advance the full amount of expenses incurred by such Investor Director and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Investor Director to the extent legally permitted and as required by the Certificate of Incorporation or the Bylaws of the Company (or any agreement between the Company and such Investor Director), without regard to any rights such Investor Director may have against the Investor Indemnitors, and, (c) that it irrevocably waives, relinquishes and releases the Investor Indemnitors from any and all claims against the Investor Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Investor Indemnitors on behalf of any such Investor Director with respect to any claim for which such Investor Director has sought indemnification from the Company shall affect the foregoing and the Investor Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Investor Director against the Company. The Investor Directors and the Investor Indemnitors are intended third party beneficiaries of this Section 5.7 and shall have the right, power and authority to enforce the provisions of this Section 5.7 as though they were a party to this Agreement.

5.8 Right to Conduct Activities. The Company hereby agrees and acknowledges that each of 5AM, venBio, RA Capital, Medivate, Venrock, RTW Fund, Surveyor, Franklin Templeton, the Cormorant Funds, Capital Group and Wellington Investor (together with their respective Affiliates) is a professional investment organization, and as such reviews the business plans and related proprietary information of many enterprises, some of which may compete directly or indirectly with the Company's business (as currently conducted or as currently propose to be conducted). The Company hereby agrees that, to the extent permitted under applicable law, any of 5AM, venBio, RA Capital, Medivate, Venrock, RTW Fund, Surveyor, Franklin Templeton, the Cormorant Funds, Capital Group and Wellington Investor (and their respective Affiliates) shall not be liable to the Company for any claim arising out of, or based upon, (i) the investment by any of 5AM, venBio, RA Capital, Medivate, Venrock, RTW Fund, Surveyor, Franklin Templeton, the Cormorant Funds, Capital Group or Wellington Investor (or their respective Affiliates) in any entity competitive with the Company, or (ii) actions taken by any partner, officer, employee or other representative of 5AM, venBio, RA Capital, Medivate, Venrock, RTW Fund, Surveyor, Franklin Templeton, the Cormorant Funds, Capital Group or Wellington Investor (or their respective Affiliates) to assist any such competitive company, whether or not such action was taken as a member of the board of directors of such competitive company or otherwise, and whether or not such action has a detrimental effect on the Company; provided, however, that the foregoing shall not relieve (x) any of the Investors from liability associated with the unauthorized disclosure of the Company's confidential information obtained pursuant to this Agreement, or (y) any director or officer of the Company from any liability associated with his or her fiduciary duties to the Company.

5.9 Harassment Policy. The Company shall maintain in effect (i) a Code of Conduct governing appropriate workplace behavior and (ii) an Anti-Harassment and Discrimination Policy prohibiting discrimination and harassment at the Company.

5.10 Cybersecurity. The Company shall use commercially reasonable efforts to ensure that the Company's cybersecurity solution(s) ("Cybersecurity Solutions") (x) are up-to-date and include industry-standard protections (e.g., antivirus, endpoint detection and response and threat hunting), (y) to the extent determined necessary by the Company or its Board of Directors, are backed by a breach prevention warranty from the vendor certifying the effectiveness of such solutions, and (z) require the vendors to notify the Company of any security incidents posing a risk to the Company's information (regardless of whether information was actually compromised). The Company shall evaluate on a regular basis whether the Cybersecurity Solutions should be updated to ensure continued effectiveness and industry-standard protections. The Company shall also educate its employees about the proper use and storage of sensitive information, including regular training as determined reasonably necessary by the Company or its Board of Directors.

5.11 Termination of Covenants. The covenants set forth in this Section 5, except for Section 5.6 and Section 5.7, shall terminate and be of no further force or effect (i) immediately before the consummation of the IPO, or (ii) upon a Deemed Liquidation Event, as such term is defined in the Certificate of Incorporation, whichever event occurs first.

6. Miscellaneous.

6.1 Successors and Assigns. The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (a) is an Affiliate of a Holder; or (b) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; provided, however, that (x) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (y) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Section 2.11. For the purposes of determining the number of shares of Registrable Securities held by a transferee, the holdings of a transferee (i) that is an Affiliate or stockholder of a Holder; (ii) who is a Holder's Immediate Family Member; or (iii)

that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder; provided further that all transferees who would not qualify individually for assignment of rights shall, as a condition to the applicable transfer, establish a single attorney-in-fact for the purpose of exercising any rights, receiving notices, or taking any action under this Agreement. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.2 Governing Law. This Agreement shall be governed by the internal law of the State of Delaware, without regard to conflict of law principles that would result in the application of any law other than the law of the State of Delaware.

6.3 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, the Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

6.4 Titles and Subtitles. The titles and subtitles used in this Agreement are for convenience only and are not to be considered in construing or interpreting this Agreement.

6.5 Notices.

(a) All notices and other communications given or made pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or (i) personal delivery to the party to be notified; (ii) when sent, if sent by electronic mail during the recipient's normal business hours, and if not sent during normal business hours, then on the recipient's next business day; (iii) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid; or (iv) one business day after the business day of deposit with a nationally recognized overnight courier, freight prepaid, specifying next-day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as set forth on **Schedule A** hereto, with copies to such counsel set forth next to a party's name on Schedule A hereto (which shall not constitute notice), or to the principal office of the Company and to the attention of the Chief Executive Officer, in the case of the Company, or to such email address or address as subsequently modified by written notice given in accordance with this Section 6.5; provided, however, that any notice sent to Venrock must be sent via email or with a copy via email. If notice is given to the Company, it shall be sent to the address as set forth on the Company's signature page to this Agreement. If notice is given to the Investors, a copy (which shall not constitute notice) shall also be given to Wilson Sonsini Goodrich & Rosati, P.C., 650 Page Mill Road, Palo Alto, CA 94304, Attention: Steve Bochner, SBochner@wsgr.com.

(b) **Consent to Electronic Notice.** Each Investor consents to the delivery of any stockholder notice pursuant to the Delaware General Corporation Law (the "DGCL"), as amended or superseded from time to time, by electronic transmission pursuant to Section 232 of the DGCL (or any successor thereto) at the electronic mail address set forth below such Investor's name on the Schedules hereto, as updated from time to time by notice to the Company, or as on the books of the Company. Each Investor agrees to promptly notify the Company of any change in such stockholder's electronic mail address, and that failure to do so shall not affect the foregoing.

6.6 Amendments and Waivers. Any term of this Agreement may be amended, modified or terminated and the observance of any term of this Agreement may be waived (either generally or in a particular instance, and either retroactively or prospectively) only with the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding; *provided* that the Company may in its sole discretion waive compliance with Section 2.12(c) (and the Company's failure to object promptly in writing after notification of a proposed assignment allegedly in violation of Section 2.12(c) shall be deemed to be a waiver); and *provided further* that any provision hereof may be waived by any waiving party on such party's own behalf, without the consent of any other party. Notwithstanding the foregoing, (a) this Agreement may not be amended, modified or terminated and the observance of any term hereof may not be waived with respect to any Investor without the written consent of such Investor, unless such amendment, modification, termination, or waiver applies to all Investors in the same fashion (it being agreed that a waiver of the provisions of Section 4 with respect to a particular transaction shall be deemed to apply to all Investors in the same fashion if such waiver does so by its terms, notwithstanding the fact that certain Investors may nonetheless, by agreement with the Company, purchase securities in such transaction) and (b) an amendment, modification, termination to or waiver of Sections 3.1 and 3.2, Section 4 and any other section of this Agreement applicable to the Major Investors (including this clause (b) of this Section 6.6) shall require only the written consent of the Company and the holders of a majority of the Registrable Securities then outstanding and held by the Major Investors. Notwithstanding the foregoing, the definition of "Major Investor" in Section 1.19 may not be amended, and the observance thereof may not be waived (either generally or in a particular instance and either retroactively or prospectively), such that a Major Investor no longer constitutes a "Major Investor" hereunder without the prior written consent of such Major Investor. Notwithstanding the foregoing, **Schedule A** hereto may be amended by the Company from time to time to add transferees of any Registrable Securities in compliance with the terms of this Agreement without the consent of the other parties; and **Schedule A** hereto may also be amended by the Company after the date of this Agreement without the consent of the other parties to add information regarding any additional Investor who becomes a party to this Agreement in accordance with Section 6.9. The Company shall give prompt notice of any amendment, modification or termination hereof or waiver hereunder to any party hereto that did not consent in writing to such amendment, modification, termination, or waiver. Any amendment, modification, termination, or waiver effected in accordance with this Section 6.6 shall be binding on all parties hereto, regardless of whether any such party has consented thereto. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

6.7 Severability. In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

6.8 Aggregation of Stock. All shares of Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliates may apportion such rights as among themselves in any manner they deem appropriate.

6.9 Additional Investors. Notwithstanding anything to the contrary contained herein, if the Company issues additional shares of the Series B Preferred Stock after the date hereof, any purchaser of such shares of Series B Preferred Stock may become a party to this Agreement by executing and delivering an additional counterpart signature page to this Agreement, and thereafter shall be deemed an "Investor" for all purposes hereunder. No action or consent by the Investors shall be required for such joinder to this Agreement by such additional Investor, so long as such additional Investor has agreed in writing to be bound by all of the obligations as an "Investor" hereunder.

6.10 Entire Agreement. This Agreement (including Schedule A hereto) constitutes the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled.

6.11 Dispute Resolution. The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the state courts of the State of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement, (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the state courts of the State of Delaware or the United States District Court for the District of Delaware, and (c) hereby waive, and agree not to assert, by way of motion, as a defense, or otherwise, in any such suit, action or proceeding, any claim that it is not subject personally to the jurisdiction of the above-named courts, that its property is exempt or immune from attachment or execution, that the suit, action or proceeding is brought in an inconvenient forum, that the venue of the suit, action or proceeding is improper or that this Agreement or the subject matter hereof may not be enforced in or by such court.

WAIVER OF JURY TRIAL: EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT AND THAT RELATE TO THE SUBJECT MATTER OF THIS TRANSACTION, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

6.12 Delays or Omissions. No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

6.13 Amendment and Restatement of Prior Agreement. The Prior Agreement is hereby amended and restated and superseded in its entirety and restated herein. Such amendment and restatement shall be effective upon the execution of this Agreement by the Company and the parties required for an amendment pursuant to Section 6.6 of the Prior Agreement. Upon such execution, all provisions of, rights granted and covenants made in the Prior Agreement are hereby waived, released and superseded in their entirety by the provisions hereof and shall have no further force or effect, including, without limitation, all rights to future stock issuances and any notice period associated therewith otherwise applicable to the transactions contemplated by the Purchase Agreement.

[Remainder of Page Intentionally Left Blank]

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

COMPANY:

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan, M.D.

Name: Fred Aslan, M.D.

Title: Chief Executive Officer

Address: 4747 Executive Drive
Suite 1150
San Diego, CA 92121

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Venrock Healthcare Capital Partners EG, L.P.

By: VHCP Management EG, LLC

Its: General Partner

By: /s/ Nimish Shah

Name: Nimish Shah

Title: Authorized Signatory

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Logos Opportunities Fund II, L.P.

By: Logos Opportunities GP, LLC

Its General Partner

By: /s/ Graham Walmsley

Name: Graham Walmsley

Title: Managing Member

By: /s/ Arsani William

Name: Arsani William

Title: Managing Partner

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

**Capital Research and Management Company, for and on
behalf of SMALLCAP World Fund, Inc.**

By: /s/ Walter R. Burkley

Name: Walter R. Burkley

Title: Authorized Signatory

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

**Wellington Biomedical Innovation Master Investors
(Cayman) I L.P.**

**By: Wellington Management Company LLP,
as investment advisor**

By: /s/ Peter N. McIsaac

Name: Peter N. McIsaac

Title: Managing Director and Counsel

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Cormorant Private Equity Fund III, LP

By: Cormorant Private Healthcare GP III, LLC

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing Member

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Cormorant Global Healthcare Master Fund, LP

By: Cormorant Global Healthcare GP, LLC

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing Member

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

CRMA SPV, L.P.

**By: Cormorant Asset Management, LP, Its
attorney-in-fact**

By: /s/ Bihua Chen

Name: Bihua Chen

Title: Managing Member

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

**Franklin Templeton Investment Funds – Franklin
Biotechnology Discovery Fund
By: Franklin Advisers, Inc., as investment manager**

By: /s/ Evan McCulloch

Name: Evan McCulloch

Title: Vice President

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

**Franklin Strategic Series – Franklin Biotechnology
Discovery Fund**

By: Franklin Advisers, Inc., as investment manager

By: /s/ Evan McCulloch

Name: Evan McCulloch

Title: Vice President

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

**Janus Henderson Biotech Innovation Master Fund
Limited**

**By: Janus Capital Management LLC, its investment
advisor**

By: /s/ Andrew Acker

Name: Andrew Acker

Title: Authorized Signatory

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

**Janus Henderson Capital Funds plc on behalf of its series
Janus Henderson Global Life Sciences Fund
By: Janus Capital Management LLC, its investment
advisor**

By: /s/ Andrew Acker

Name: Andrew Acker

Title: Authorized Signatory

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Janus Henderson Horizon Fund – Biotechnology Fund

**By: Janus Capital Management LLC, its investment
advisor**

By: /s/ Andrew Acker

Name: Andrew Acker

Title: Authorized Signatory

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

RTW Master Fund, Ltd.

By: /s/ Roderick Wong, M.D.

Name: Roderick Wong, M.D.

Title: Director

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

RTW Innovation Master Fund, Ltd.

By: /s/ Roderick Wong, M.D.

Name: Roderick Wong, M.D.

Title: Director

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

RTW Venture Fund Limited

By: RTW Investments, LP, its Investment Manager

By: /s/ Roderick Wong, M.D.

Name: Roderick Wong, M.D.

Title: Managing Partner

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

**CITADEL MULTI-STRATEGY EQUITIES MASTER
FUND LTD.**

By: Citadel Advisors LLC, its portfolio manager

By: /s/ Christopher L. Ramsay

Name: Christopher L. Ramsay

Title: Authorized Signatory

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Acuta Capital Fund, LP

By: Acuta Capital Partners, LLC

Its: General Partner

By: /s/ Scott R. Smith

Name: Scott R. Smith

Title: Chief Operating Officer

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Acuta Opportunity Fund, LP

By: Acuta Capital Partners, LLC

Its: General Partner

By: /s/ Scott R. Smith

Name: Scott R. Smith

Title: Chief Operating Officer

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

EcoR1 Capital Fund, L.P.

By: EcoR1 Capital, LLC, its General Partner

By: /s/ Oleg Nodelman

Name: Oleg Nodelman

Title: Manager

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

EcoR1 Capital Fund Qualified, L.P.

By: EcoR1 Capital, LLC, its General Partner

By: /s/ Oleg Nodelman

Name: Oleg Nodelman

Title: Manager

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

EcoR1 Venture Opportunity Fund, L.P.

By: Biotech Opportunity GP, LLC, its General Partner

By: /s/ Oleg Nodelman

Name: Oleg Nodelman

Title: Manager

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Green Cross Holdings Corporation

By: /s/ Yong-Jun Huh

Name: Yong-Jun Huh

Title: Chief Executive Officer

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Green Cross LabCell Corporation

By: /s/ Dae-Woo Park

Name: Dae-Woo Park

Title: Chief Executive Officer

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

5AM Ventures VI, L.P.

By: 5AM Partners VI, LLC, its General Partner

By: /s/ Andrew Schwab

Name: Andrew Schwab

Title: Managing Partner

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

venBio Global Strategic Fund III, L.P.

By: venBio Global Strategic GP III, L.P., its general partner

By: venBio Global Strategic GP III, Ltd., its general partner

By: /s/ Aaron Royston

Name: Aaron Royston

Title: Director

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

RA Capital Healthcare Fund, L.P.

By: RA Capital Healthcare Fund GP, LLC, its General Partner

By: /s/ Rajeev Shah

Name: Rajeev Shah

Title: Manager

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Blackwell Partners LLC – Series A

By: /s/ Rajeev Shah

Name: Rajeev Shah

Title: Authorized Signatory

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

RA Capital Nexus Fund, L.P.

**By: RA Capital Nexus Fund GP, LLC, its General
Partner**

By: /s/ Rajeev Shah

Name: Rajeev Shah

Title: Manager

The parties have executed this Amended and Restated Investors' Rights Agreement as of the date first written above.

INVESTOR:

Medivate-DAvalue Fund No.03

By: Medivate Partners, LLC

By: /s/ S. Roger Kang

Name: S. Roger Kang

Title: Managing Partner

By: DA Value Investment Co., Ltd.

By: /s/ Jin Oh Park

Name: Jin Oh Park

Title: Deputy CEO

SCHEDULE A**INVESTORS**

Name	Address	Email
Venrock Healthcare Capital Partners EG, L.P.	7 Bryant Park, 23rd Floor New York, NY 10018 Attn: Nimish Shah	
Logos Opportunities Fund II, L.P.	1 Letterman Drive Building D, Suite D3-700 San Francisco, CA 94129	
SMALLCAP World Fund, Inc.	333 S. Hope Street, 55 th floor Los Angeles, California 90071 c/o Capital Research and Management Company Attn:	
Wellington Biomedical Innovation Master Investors (Cayman) I L.P.	c/o Wellington Management Company LLP Legal and Compliance 280 Congress Street Boston, MA 02210 Attn: With a copy (which shall not constitute notice) to: Wilmer Cutler Pickering Hale and Dorr LLP 60 State Street Boston, MA 02109 Attn:	
Cormorant Private Equity Fund III, LP	c/o Cormorant Asset Management LP 200 Clarendon Street 52nd Floor Boston, MA 02116 Attn: Telephone:	

Name	Address	Email
Cormorant Global Healthcare Master Fund, LP	c/o Cormorant Asset Management LP 200 Clarendon Street 52nd Floor Boston, MA 02116 Attn: Telephone:	
CRMA SPV, L.P.	c/o Cormorant Asset Management LP 200 Clarendon Street 52nd Floor Boston, MA 02116 Attn: Telephone:	
Franklin Templeton Investment Funds – Franklin Biotechnology Discovery Fund	c/o Franklin Advisers, Inc. One Franklin Parkway San Mateo, CA 94403 Attn:	
Franklin Strategic Series – Franklin Biotechnology Discovery Fund	c/o Franklin Advisers, Inc. One Franklin Parkway San Mateo, CA 94403 Attn:	
Janus Henderson Biotech Innovation Master Fund Limited	c/o Janus Capital Management LLC 151 Detroit Street Denver, CO 80206 Attn:	
Janus Henderson Capital Funds plc on behalf of its series Janus Henderson Global Life Sciences Fund	c/o Janus Capital Management LLC 151 Detroit Street Denver, CO 80206 Attn:	
Janus Henderson Horizon Fund—Biotechnology Fund	c/o Janus Capital Management LLC 151 Detroit Street Denver, CO 80206 Attn:	

Name	Address	Email
RTW Master Fund, Ltd.	c/o RTW Investments, LP 40 10th Avenue, Floor 7 New York, NY 10014 Attention:	
RTW Innovation Master Fund, Ltd.	c/o RTW Investments, LP 40 10th Avenue, Floor 7 New York, NY 10014 Attention:	
RTW Venture Fund Limited	c/o RTW Investments, LP 40 10th Avenue, Floor 7 New York, NY 10014 Attention:	
Citadel Multi-Strategy Equities Master Fund Ltd.	c/o Citadel Advisors LLC 601 Lexington Avenue New York, New York 10022 Attention: With copies to: Choate, Hall & Stewart, LLP Two International Place Boston, MA 02100 Attention:	
Acuta Capital Fund, LP Attention: Scott Smith, Chief Operating Officer	1301 Shoreway Road, Suite 350 Belmont, CA 94002 (650) 486-0581	
Acuta Opportunity Fund, LP Attention: Scott Smith, Chief Operating Officer	1301 Shoreway Road, Suite 350 Belmont, CA 94002 (650) 486-0581	
EcoR1 Capital Fund, L.P.	c/o EcoR1 Capital, LLC 357 Tehama Street #3 San Francisco, CA 94103 Attention: Telephone:	
EcoR1 Capital Fund Qualified, L.P.	c/o EcoR1 Capital, LLC 357 Tehama Street #3 San Francisco, CA 94103 Attention: Telephone:	

Name	Address	Email
EcoR1 Venture Opportunity Fund, L.P.	c/o EcoR1 Capital, LLC 357 Tehama Street #3 San Francisco, CA 94103 Attention: Telephone:	
5AM Ventures VI, L.P.	501 Second Street, Ste. 350 San Francisco, CA 94107	
Green Cross Holdings Corporation	107 Ihyeon-ro, 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 16924 Republic of Korea	
Green Cross LabCell Corporation	107 Ihyeon-ro, 30beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 16924 Republic of Korea	
venBio Global Strategic Fund III, L.P	venBio Partners LLC 1700 Owens Street, Suite 595 San Francisco, CA 94158 Attention:	
RA Capital Healthcare Fund, L.P.	RA Capital Management, L.P. 200 Berkeley Street, 18 th Floor Boston, MA 02116 Attention:	
Blackwell Partners LLC – Series A	280 S. Mangum Street, Suite 210 Durham, NC 27701 Attention:	
RA Capital Nexus Fund, L.P.	RA Capital Management, L.P. 200 Berkeley Street, 18 th Floor Boston, MA 02116 Attention:	
Medivate-DAvalue Fund No.03	15F, Kwangil Plaza, 331, Gangnam-dero, Seocho-gu, Seoul, Korea 06627	

INDEMNITY AGREEMENT

THIS INDEMNITY AGREEMENT (this “*Agreement*”) dated as of _____, 2024, is made by and between ARTIVA BIOTHERAPEUTICS, INC., a Delaware corporation (the “*Company*”), and [_____] (“*Indemnitee*”).

RECITALS

A. The Company desires to attract and retain the services of highly qualified individuals as directors, officers, employees and agents.

B. The Company’s Amended and Restated Bylaws (the “*Bylaws*”) require that the Company indemnify its directors and officers, and empowers the Company to indemnify its employees and other agents, as authorized by the Delaware General Corporation Law, as amended (the “*Code*”), under which the Company is organized and such Bylaws expressly provide that the indemnification provided therein is not exclusive and contemplates that the Company may enter into separate agreements with its directors, officers and other persons to set forth specific indemnification provisions.

C. Indemnitee does not regard the protection currently provided by applicable law, the Bylaws, the Company’s other governing documents, and available insurance as adequate under the present circumstances, and the Company has determined that Indemnitee and other directors, officers, employees and agents of the Company may not be willing to serve or continue to serve in such capacities without additional protection.

D. The Company desires and has requested Indemnitee to serve or continue to serve as a director, officer, employee or agent of the Company, as the case may be, and has proffered this Agreement to Indemnitee as an additional inducement to serve in such capacity.

E. Indemnitee is willing to serve, or to continue to serve, as a director, officer, employee or agent of the Company, as the case may be, if Indemnitee is furnished the indemnity provided for herein by the Company.

AGREEMENT

NOW THEREFORE, in consideration of the mutual covenants and agreements set forth herein, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Definitions.

(a) **Agent.** For purposes of this Agreement, the term “*Agent*” of the Company means any person who: (i) is or was a director, officer, employee, agent, or other fiduciary of the Company or a subsidiary of the Company; or (ii) is or was serving at the request or for the convenience of, or representing the interests of, the Company or a subsidiary of the Company, as a director, officer, employee, agent, or other fiduciary of a foreign or domestic corporation, partnership, joint venture, trust or other enterprise.

(b) Change in Control. For purposes of this Agreement, a “*Change in Control*” shall be deemed to have occurred if (i) any “person” (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended (the “*Exchange Act*”), other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company or a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company, is or becomes the “beneficial owner” (as defined in Rule 13d-3 under the Exchange Act), directly or indirectly, of securities of the Company representing 20% or more of the total voting power represented by the Company’s then outstanding Voting Securities, (ii) individuals who on the date of this Agreement are members of the Company’s Board of Directors (the “*Board of Directors*” and altogether, the “*Incumbent Board*”) cease for any reason to constitute at least a majority of the members of the Board of Directors (*provided, however*, that if the appointment or election (or nomination for election) of any new board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall be considered as a member of the Incumbent Board), or (iii) the stockholders of the Company approve a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the Voting Securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into Voting Securities of the surviving entity) at least 80% of the total voting power represented by the Voting Securities of the Company or such surviving entity outstanding immediately after such merger or consolidation, or the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of (in one transaction or a series of transactions) all or substantially all of the Company’s assets.

(c) Expenses. For purposes of this Agreement, the term “*Expenses*” shall be broadly construed and shall include, without limitation, all direct and indirect costs of any type or nature whatsoever, including, without limitation, all attorneys’, witness, or other professional fees and related disbursements, and other out-of-pocket costs of whatever nature, actually and reasonably incurred by Indemnitee in connection with the investigation, defense or appeal of a proceeding or establishing or enforcing a right to indemnification under this Agreement, the Code or otherwise. The term “*Expenses*” shall also include reasonable compensation for time spent by Indemnitee for which he or she is not compensated by the Company or any subsidiary or third party: (i) for any period during which Indemnitee is not an Agent, in the employment of, or providing services for compensation to, the Company or any subsidiary; and (ii) if the rate of compensation and estimated time involved is approved by the directors of the Company who are not parties to any action with respect to which Expenses are incurred, for Indemnitee while an Agent of, employed by, or providing services for compensation to, the Company or any subsidiary.

(d) Independent Counsel. For purposes of this Agreement, the term “*Independent Counsel*” means a law firm, or a partner (or, if applicable, member) of such a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five (5) years has been, retained to represent: (i) the Company or Indemnitee in any matter material to either such party, or (ii) any other party to the proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term “*Independent Counsel*” shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee’s rights under this Agreement. The Company will pay the reasonable fees and expenses of the Independent Counsel referred to above and to fully indemnify such counsel against any and all Expenses, claims, Liabilities and damages arising out of or relating to this Agreement or its engagement pursuant hereto.

(e) Liabilities. For purposes of this Agreement, the term “*Liabilities*” shall be broadly construed and shall include, without limitation, judgments, damages, deficiencies, liabilities, losses, penalties, excise taxes, fines, assessments and amounts paid in settlement, including any interest and any federal, state, local or foreign taxes imposed as a result of the actual or deemed receipt of any payment under this Agreement.

(f) Proceedings. For purposes of this Agreement, the term “*proceeding*” shall be broadly construed and shall include, without limitation, any threatened, pending, or completed action, suit, claim, counterclaim, cross claim, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing, or any other actual, threatened or completed proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, and whether formal or informal in any case, in which Indemnatee was, is or will be involved as a party, potential party, non-party witness, or otherwise by reason of: (i) the fact that Indemnatee is or was a director or officer of the Company; (ii) the fact that any action taken by Indemnatee (or a failure to take action by Indemnatee) or of any action (or failure to act) on Indemnatee’s part while acting as an Agent; or (iii) the fact that Indemnatee is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan, or other enterprise, and in any such case described above, whether or not serving in any such capacity at the time any liability or Expense is incurred for which indemnification, reimbursement, or advancement of Expenses may be provided under this Agreement. If the Indemnatee believes in good faith that a given situation may lead to or culminate in the institution of a proceeding, this shall be considered a proceeding under this paragraph.

(g) Subsidiary. For purposes of this Agreement, the term “*subsidiary*” means any corporation, limited liability company, or other entity, of which more than 50% of the outstanding voting securities or equity interests are owned, directly or indirectly, by the Company and one or more of its subsidiaries, and any other corporation, limited liability company, partnership, joint venture, trust, employee benefit plan or other enterprise of which Indemnatee is or was serving at the request of the Company as an Agent.

(h) Voting Securities. For purposes of this Agreement, “*Voting Securities*” shall mean any securities of the Company that vote generally in the election of directors.

2. Agreement to Serve. Indemnatee will serve, or continue to serve, as the case may be, as an Agent, faithfully and to the best of his or her ability, at the will of such entity designated by the Company and at the request of the Company (or under separate agreement, if such agreement exists), in the capacity Indemnatee currently serves such entity, so long as Indemnatee is duly appointed or elected and qualified in accordance with the applicable provisions of the governance documents of such entity, or until such time as Indemnatee tenders his or her resignation in writing; provided, however, that nothing contained in this Agreement is intended as an employment agreement between Indemnatee and the Company or any of its subsidiaries or to create any right to continued employment of Indemnatee with the Company or any of its subsidiaries in any capacity.

The Company acknowledges that it has entered into this Agreement and assumes the obligations imposed on it hereby, in addition to and separate from its obligations to Indemnatee under the Bylaws, to induce Indemnatee to serve, or continue to serve, as an Agent, and the Company acknowledges that Indemnatee is relying upon this Agreement in serving as an Agent.

3. Indemnification.

(a) Indemnification in Third Party Proceedings. Subject to Section 10 below, the Company shall indemnify Indemnatee to the fullest extent permitted by the Code, as the same may be amended from time to time (but, to the fullest extent of the law, only to the extent that such amendment permits Indemnatee to broader indemnification rights than the Code permitted prior to adoption of such amendment), if Indemnatee is a party to or threatened to be made a party to or otherwise involved in any proceeding, other than a proceeding by or in the right of the Company to procure a judgment in its favor, for any and all Expenses and Liabilities (including all interest, assessments and other charges paid or payable in connection with or in respect of such Expenses and Liabilities) incurred by Indemnatee in connection with the investigation, defense, settlement or appeal of such proceeding, if Indemnatee acted in good faith and in a manner Indemnatee reasonably believed to be in or not opposed to the best interests of the Company and, in the case of a criminal proceeding had no reasonable cause to believe that Indemnatee's conduct was unlawful. The parties hereto intend that this Agreement shall provide to the fullest extent permitted by law for indemnification in excess of that expressly permitted by statute, including, without limitation, any indemnification provided by the Amended and Restated Certificate of Incorporation of the Company, which may be amended from time to time (the "*Certificate of Incorporation*"), the Bylaws, vote of its stockholders or disinterested directors, or applicable law.

(b) Indemnification in Derivative Actions and Direct Actions by the Company. Subject to Section 10 below, the Company shall indemnify Indemnatee to the fullest extent permitted by the Code, as the same may be amended from time to time (but, fullest extent permitted by applicable law, only to the extent that such amendment permits Indemnatee to broader indemnification rights than the Code permitted prior to adoption of such amendment), if Indemnatee is a party to or threatened to be made a party to or otherwise involved in any proceeding by or in the right of the Company to procure a judgment in its favor, against any and all Expenses actually and reasonably incurred by Indemnatee in connection with the investigation, defense, settlement, or appeal of such proceedings, if Indemnatee acted in good faith and in a manner Indemnatee reasonably believed to be in or not opposed to the best interests of the Company. No indemnification for Expenses shall be made under this Section 3(b) in respect of any claim, issue or matter as to which Indemnatee shall have been finally adjudged by a court competent jurisdiction to be liable to the Company, unless and only to the extent that the Chancery Court of the State of Delaware (the "*Delaware Court*") or any court in which the proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnatee is fairly and reasonably entitled to indemnification.

4. Indemnification of Expenses of Successful Party. Notwithstanding any other provision of this Agreement, in circumstances where indemnification is not available under Section 3(a) or 3(b), as the case may be, to the fullest extent permitted by law and to the extent that Indemnatee is a party to (or a participant in) any proceeding and has been successful on the merits or otherwise in defense of any proceeding or in defense of any claim, issue or matter therein, in whole or part, including the dismissal of any action without prejudice, the Company shall indemnify Indemnatee against all Expenses and Liabilities in connection with the investigation, defense or appeal of such proceeding. If Indemnatee is not wholly successful in such proceeding but is successful, on the merits or otherwise, as to one or more but less than all claims, issues or matters in such proceeding, the Company shall indemnify Indemnatee against all Expenses and Liabilities incurred by Indemnatee or on Indemnatee's behalf in connection with or related to each successfully resolved claim, issue or matter to the fullest extent permitted by law.

5. Partial Indemnification; Witness Indemnification. If Indemnatee is entitled under any provision of this Agreement to indemnification by the Company for some or a portion of any Expenses and Liabilities incurred by Indemnatee in the investigation, defense, settlement or appeal of a proceeding, but is precluded by applicable law or the specific terms of this Agreement to indemnification for the total amount thereof, the Company shall nevertheless indemnify Indemnatee for the portion thereof to which Indemnatee is entitled. Notwithstanding any other provision of this Agreement, to the fullest extent permitted by applicable law and to the extent that Indemnatee is, by reason of Indemnatee's acting as an Agent, a witness or otherwise asked to participate in any proceeding to which Indemnatee is not a party, Indemnatee shall be indemnified against all Expenses incurred by Indemnatee or on Indemnatee's behalf in connection therewith.

6. Advancement of Expenses. To the extent not prohibited by law, the Company shall advance the Expenses incurred by Indemnatee in connection with any proceeding, and such advancement shall be made within twenty (20) days after the receipt by the Company of a statement or statements requesting such advances (which shall include invoices received by Indemnatee in connection with such Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditures made that would cause Indemnatee to waive any privilege accorded by applicable law shall not be included with the invoice) and upon request of the Company, an undertaking to repay the advancement of Expenses if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnatee is not entitled to be indemnified by the Company. Advances shall be unsecured, interest free and without regard to Indemnatee's ability to repay the Expenses. Advances shall include any and all Expenses incurred by Indemnatee pursuing an action to enforce Indemnatee's right to indemnification under this Agreement or otherwise and this right of advancement, including expenses incurred preparing and forwarding statements to the Company to support the advances claimed. Indemnatee acknowledges that the execution and delivery of this Agreement shall constitute an undertaking providing that Indemnatee shall, to the fullest extent required by law, repay the advance (without interest) if and to the extent that it is ultimately determined by a court of competent jurisdiction in a final judgment, not subject to appeal, that Indemnatee is not entitled to be indemnified by the Company. The right to advances under this Section 6 shall continue until final disposition of any proceeding, including any appeal therein. This Section 6 shall not apply to any claim made by Indemnatee for which indemnity is excluded pursuant to Section 10(b).

7. Notice and Other Indemnification Procedures.

(a) Notification of Proceeding. Indemnatee will notify the Company in writing promptly upon being served with any summons, citation, subpoena, complaint, indictment, information or other document relating to any proceeding or matter which may be subject to indemnification or advancement of Expenses covered hereunder. The written notification to the Company shall include a description of the nature of the proceeding and the facts underlying the proceeding. The failure of Indemnatee to so notify the Company shall not relieve the Company of any obligation which it may have to Indemnatee under this Agreement or otherwise and any delay in so notifying the Company shall not constitute a waiver by Indemnatee of any rights under this Agreement.

(b) Request for Indemnification Payments. To obtain indemnification under this Agreement, Indemnatee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnatee and is reasonably necessary to determine whether and to what extent Indemnatee is entitled to indemnification under the terms of this Agreement, and shall request payment thereof by the Company.

(c) Determination of Right to Indemnification Payments. Upon written request by Indemnatee for indemnification pursuant to the Section 7(b) hereof, a determination with respect to Indemnatee's entitlement thereto shall be made in the specific case by one of the following four methods, which shall be at the election of the Board of Directors: (1) by a majority vote of the disinterested directors, even though less than a quorum, (2) by a committee of disinterested directors designated by a majority vote of the disinterested directors, even though less than a quorum, (3) if there are no disinterested directors or if the disinterested directors so direct, by Independent Counsel in a written opinion to the Board of Directors, a copy of which shall be delivered to the Indemnatee, or (4) if so directed by the Board of Directors, by the stockholders of the Company; *provided, however*, that if there has been a Change in Control, then such determination shall be made by Independent Counsel selected by Indemnatee and approved by the Company (which approval shall not be unreasonably withheld). For purposes hereof, disinterested directors are those members of the Board of Directors who are not parties to the action, suit or proceeding in respect of which indemnification is sought by Indemnatee. Indemnification payments requested by Indemnatee under Section 3 hereof shall be made by the Company no later than sixty (60) days after receipt of the written request of Indemnatee. Claims for advancement of Expenses shall be made under the provisions of Section 6 herein.

(d) Application for Enforcement. In the event the Company fails to make timely payments as set forth in Sections 6 or 7(b) above, Indemnatee shall have the right to apply to any court of competent jurisdiction for the purpose of enforcing Indemnatee's right to indemnification or advancement of Expenses pursuant to this Agreement. In such an enforcement hearing or proceeding, the burden of proof shall be on the Company to prove that indemnification or advancement of Expenses to Indemnatee is not required under this Agreement or permitted by applicable law. Any determination by the Company (including its Board of Directors, a committee thereof, Independent Counsel) or stockholders of the Company, that Indemnatee is not entitled to indemnification hereunder, shall not be a defense by the Company to the action nor create any presumption that Indemnatee is not entitled to indemnification or advancement of Expenses hereunder.

(e) Indemnification of Certain Expenses. The Company shall indemnify Indemnitee against all Expenses incurred in connection with any hearing or proceeding under this Section 7 unless the Company prevails in such hearing or proceeding on the merits in all material respects.

8. Assumption of Defense. In the event the Company shall be requested by Indemnitee to pay the Expenses of any proceeding, the Company, if appropriate, shall be entitled to assume the defense of such proceeding, or to participate to the extent permissible in such proceeding, with counsel reasonably acceptable to Indemnitee. Upon assumption of the defense by the Company and the retention of such counsel by the Company, the Company shall not be liable to Indemnitee under this Agreement for any fees of counsel subsequently incurred by Indemnitee with respect to the same proceeding, provided that Indemnitee shall have the right to employ separate counsel in such proceeding at Indemnitee's sole cost and expense. Notwithstanding the foregoing, if Indemnitee's counsel delivers a written notice to the Company stating that such counsel has reasonably concluded that there may be a conflict of interest between the Company and Indemnitee in the conduct of any such defense or the Company shall not, in fact, have employed counsel or otherwise actively pursued the defense of such proceeding within a reasonable time, then in any such event the fees and Expenses of Indemnitee's counsel to defend such proceeding shall be subject to the indemnification and advancement of Expenses provisions of this Agreement.

9. Insurance. To the extent that the Company maintains an insurance policy or policies providing liability insurance for Agents ("**D&O Insurance**"), Indemnitee shall be covered by such policy or policies in accordance with its or their terms to the maximum extent of the coverage available for any such Agent under such policy or policies. If, at the time of the receipt of a notice of a claim pursuant to the terms hereof, the Company has D&O Insurance in effect or otherwise potentially available, the Company shall give prompt notice of the commencement of such proceeding to the insurers in accordance with the procedures set forth in the respective policies. The Company shall thereafter take all necessary or desirable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such proceeding in accordance with the terms of such policies.

10. Exceptions.

(a) Certain Matters. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee on account of any proceeding with respect to: (i) remuneration paid to Indemnitee if it is determined by final judgment or other final adjudication that such remuneration was in violation of law (and, in this respect, both the Company and Indemnitee have been advised that the Securities and Exchange Commission (the "**SEC**") believes that indemnification for liabilities arising under the federal securities laws is against public policy and is, therefore, unenforceable and that claims for indemnification should be submitted to appropriate courts for adjudication, as indicated in Section 10(d) below); (ii) a final judgment rendered against Indemnitee for an accounting, disgorgement or repayment of profits made from the purchase or sale by Indemnitee of securities

of the Company against Indemnitee or in connection with a settlement by or on behalf of Indemnitee to the extent it is acknowledged by Indemnitee and the Company that such amount paid in settlement resulted from Indemnitee's conduct from which Indemnitee received monetary personal profit, pursuant to the provisions of Section 16(b) of the Exchange Act or other provisions of any federal, state or local statute or rules and regulations thereunder; (iii) a final judgment or other final adjudication that Indemnitee's conduct was in bad faith, knowingly fraudulent or deliberately dishonest or constituted willful misconduct (but only to the extent of such specific determination); or (iv) on account of conduct that is established by a final judgment as constituting a breach of Indemnitee's duty of loyalty to the Company or resulting in any personal profit or advantage to which Indemnitee is not legally entitled. For purposes of the foregoing sentence, a final judgment or other adjudication may be reached in either the underlying proceeding or action in connection with which indemnification is sought or a separate proceeding or action to establish rights and Liabilities under this Agreement.

(b) Claims Initiated by Indemnitee. Any provision herein to the contrary notwithstanding, the Company shall not be obligated to indemnify or advance Expenses to Indemnitee with respect to proceedings or claims initiated or brought by Indemnitee against the Company or its Agents and not by way of defense, except (i) with respect to proceedings brought to establish or enforce a right to indemnification or advancement under this Agreement or under any other agreement, provision in the Bylaws or the Certificate of Incorporation or applicable law, or (ii) with respect to any other proceeding initiated by Indemnitee that is either approved by the Board of Directors or Indemnitee's participation is required by applicable law. However, indemnification or advancement of Expenses may be provided by the Company in specific cases if the Board of Directors determines it to be appropriate.

(c) Unauthorized Settlements. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee under this Agreement for any amounts paid in settlement of a proceeding effected without the Company's written consent. Neither the Company nor Indemnitee shall unreasonably withhold consent to any proposed settlement; provided, however, that the Company may in any event decline to consent to (or to otherwise admit or agree to any liability for indemnification hereunder in respect of) any proposed settlement if the Company is also a party in such proceeding and determines in good faith that such settlement is not in the best interests of the Company and its stockholders.

(d) Securities Act Liabilities. Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify Indemnitee or otherwise act in violation of any undertaking appearing in and required by the rules and regulations promulgated under the Securities Act of 1933, as amended (the "**Securities Act**"), or in any registration statement filed with the SEC under the Securities Act. Indemnitee acknowledges that paragraph (h) of Item 512 of Regulation S-K currently generally requires the Company to undertake in connection with any registration statement filed under the Securities Act to submit the issue of the enforceability of Indemnitee's rights under this Agreement in connection with any liability under the Securities Act on public policy grounds to a court of appropriate jurisdiction and to be governed by any final adjudication of such issue. Indemnitee specifically agrees that any such undertaking shall supersede the provisions of this Agreement and to be bound by any such undertaking.

(e) Prior Payments Any provision herein to the contrary notwithstanding, the Company shall not be obligated pursuant to the terms of this Agreement to indemnify or advance Expenses to Indemnitee under this Agreement for which payment has actually been made to or on behalf of Indemnitee under any insurance policy or other indemnity provision, except with respect to any excess beyond the amount paid under any insurance policy or indemnity policy.

11. Nonexclusivity and Survival of Rights. The provisions for indemnification and advancement of Expenses set forth in this Agreement shall not be deemed exclusive of any other rights which Indemnitee may at any time be entitled under any provision of applicable law, the Certificate of Incorporation, the Bylaws or other agreements, both as to action in Indemnitee's official capacity and Indemnitee's action as an Agent, in any court in which a proceeding is brought, and Indemnitee's rights hereunder shall continue after Indemnitee has ceased acting as an Agent and shall inure to the benefit of the heirs, executors, administrators and assigns of Indemnitee. The obligations and duties of the Company to Indemnitee under this Agreement shall be binding on the Company and its successors and assigns until terminated in accordance with its terms. The Company shall require any successor (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business or assets of the Company, expressly to assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform if no such succession had taken place.

No amendment, alteration or repeal of this Agreement or of any provision hereof shall limit or restrict any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her corporate status prior to such amendment, alteration or repeal. To the extent that a change in the Code, whether by statute or judicial decision, permits greater indemnification or advancement of Expenses than would be afforded currently under the Certificate of Incorporation, the Bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change. No right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, by Indemnitee shall not prevent the concurrent assertion or employment of any other right or remedy by Indemnitee.

12. Term. This Agreement shall continue until and terminate upon the later of: (a) five (5) years after the date that Indemnitee shall have ceased to serve as an Agent; or (b) one (1) year after the final termination of any proceeding, including any appeal then pending, in respect to which Indemnitee was granted rights of indemnification or advancement of Expenses hereunder.

No legal action shall be brought and no cause of action shall be asserted by or in the right of the Company against an Indemnitee or an Indemnitee's estate, spouse, heirs, executors or personal or legal representatives after the expiration of five (5) years from the date of accrual of such cause of action, and any claim or cause of action of the Company shall be extinguished and deemed released unless asserted by the timely filing of a legal action within such five-year period; provided, however, that if any shorter period of limitations is otherwise applicable to such cause of action, such shorter period shall govern.

13. [To be included if applicable:] Primacy of Indemnification. The Company hereby acknowledges that Indemnitee has certain rights to indemnification, advancement of expenses and/or insurance provided by [Name of Fund/Sponsor] and certain of [its][their] affiliates (collectively, the “**Fund Indemnitors**”). The Company hereby agrees (i) that it is the indemnitor of first resort (i.e., its obligations to Indemnitee are primary and any obligation of the Fund Indemnitors to advance expenses or to provide indemnification for the same expenses or liabilities incurred by Indemnitee are secondary), (ii) that it shall be required to advance the full amount of expenses incurred by Indemnitee and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement to the extent legally permitted and as required by the terms of this Agreement and the Certificate of Incorporation or Bylaws (or any other agreement between the Company and Indemnitee), without regard to any rights Indemnitee may have against the Fund Indemnitors, and (iii) that it irrevocably waives, relinquishes and releases the Fund Indemnitors from any and all claims against the Fund Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Company further agrees that no advancement or payment by the Fund Indemnitors on behalf of Indemnitee with respect to any claim for which Indemnitee has sought indemnification from the Company shall affect the foregoing and the Fund Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of Indemnitee against the Company. The Company and Indemnitee agree that the Fund Indemnitors are express third party beneficiaries of the terms of this Section 13.

14. Subrogation. In the event of payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who, at the request and expense of the Company, shall execute all papers required and shall do everything that may be reasonably necessary to secure such rights, including the execution of such documents necessary to enable the Company effectively to bring suit to enforce such rights.

15. Interpretation of Agreement. It is understood that the parties hereto intend this Agreement to be interpreted and enforced so as to provide indemnification and advancement of Expenses to Indemnitee to the fullest extent now or hereafter permitted by law.

16. Severability. If any provision of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever, (a) the validity, legality and enforceability of the remaining provisions of the Agreement (including without limitation, all portions of any paragraphs of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (b) to the fullest extent possible, the provisions of this Agreement (including, without limitation, all portions of any paragraph of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that are not themselves invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable and to give effect to Section [14 / 15] hereof.

17. Amendment and Waiver. No supplement, modification, amendment, or cancellation of this Agreement shall be binding unless executed in writing by the parties hereto. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (whether or not similar) nor shall such waiver constitute a continuing waiver.

18. Notice. Except as otherwise provided herein, any notice or demand which, by the provisions hereof, is required or which may be given to or served upon the parties hereto shall be in writing and, if by electronic transmission, shall be deemed to have been validly served, given or delivered when sent, if by overnight delivery, courier or personal delivery, shall be deemed to have been validly served, given or delivered upon actual delivery and, if mailed, shall be deemed to have been validly served, given or delivered three (3) business days after deposit in the United States mail, as registered or certified mail, with proper postage prepaid and addressed to the party or parties to be notified at the addresses set forth on the signature page of this Agreement (or such other address(es) as a party may designate for itself by like notice). If to the Company, notices and demands shall be delivered to the attention of the Secretary of the Company.

19. Governing Law. This Agreement shall be governed exclusively by and construed according to the laws of the State of Delaware, as applied to contracts between Delaware residents entered into and to be performed entirely within Delaware.

20. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute but one and the same Agreement. Only one such counterpart need be produced to evidence the existence of this Agreement.

21. Headings. The headings of the sections of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction hereof.

22. Entire Agreement. Subject to Section 11 hereof, this Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements, understandings and negotiations, written and oral, between the parties with respect to the subject matter of this Agreement; provided, however, that this Agreement is a supplement to and in furtherance of the Certificate of Incorporation, the Bylaws, the Code and any other applicable law, and shall not be deemed a substitute therefor, and does not diminish or abrogate any rights of Indemnitee thereunder.

23. Contribution. To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee for any reason whatsoever, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amount incurred by Indemnitee, whether for judgments, fines, penalties, excise taxes, amounts paid or to be paid in settlement and/or for Expenses, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the event(s) and/or transaction(s) giving cause to such proceeding; and/or (ii) the relative fault of the Company and Indemnitee in connection with such event(s) and/or transaction(s).

24. Consent to Jurisdiction. The Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the

exclusive jurisdiction of the Delaware Court for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) agree to appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, an agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court has been brought in an improper or inconvenient forum.

IN WITNESS WHEREOF, the parties hereto have entered into this Agreement effective as of the date first above written.

ARTIVA BIOTHERAPEUTICS, INC.

By: _____

Name: Fred Aslan, M.D.

Title: Chief Executive Officer

INDEMNITEE

Signature of Indemnitee

Print or Type Name of Indemnitee

ARTIVA BIOTHERAPEUTICS, INC.

2020 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: June 24, 2020

APPROVED BY THE STOCKHOLDERS: June 25, 2020

AMENDED BY THE BOARD OF DIRECTORS: December 18, 2020

APPROVED BY THE STOCKHOLDERS: December 18, 2020

AMENDED BY THE BOARD OF DIRECTORS: February 19, 2021

APPROVED BY THE STOCKHOLDERS: February 19, 2021

AMENDED BY THE BOARD OF DIRECTORS: July 29, 2021

APPROVED BY THE STOCKHOLDERS: August 23, 2021

AMENDED BY THE BOARD OF DIRECTORS: August 24, 2022

APPROVED BY THE STOCKHOLDERS: August 30, 2022

TERMINATION DATE: June 23, 2030

1. General.

(a) Eligible Stock Award Recipients. Employees, Directors and Consultants are eligible to receive Stock Awards.

(b) Available Stock Awards. The Plan provides for the grant of the following types of Stock Awards: (i) Incentive Stock Options, (ii) Nonstatutory Stock Options, (iii) Stock Appreciation Rights, (iv) Restricted Stock Awards, (v) Restricted Stock Unit Awards and (vi) Other Stock Awards.

(c) Purpose. The Plan, through the grant of Stock Awards, is intended to help the Company secure and retain the services of eligible award recipients, provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and provide a means by which the eligible recipients may benefit from increases in value of the Common Stock.

2. Administration.

(a) Administration by the Board. The Board will administer the Plan. The Board may delegate administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) Powers of the Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine (A) who will be granted Stock Awards; (B) when and how each Stock Award will be granted; (C) what type of Stock Award will be granted; (D) the provisions of each Stock Award (which need not be identical), including when a person will be permitted to exercise or otherwise receive cash or Common Stock under the Stock Award; (E) the number of shares of Common Stock subject to, or the cash value of, a Stock Award; and (F) the Fair Market Value applicable to a Stock Award.

(ii) To construe and interpret the Plan and Stock Awards granted under it, and to establish, amend and revoke rules and regulations for administration of the Plan and Stock Awards. The Board, in the exercise of these powers, may correct any defect, omission or inconsistency in the Plan or in any Stock Award Agreement, in a manner and to the extent it will deem necessary or expedient to make the Plan or Stock Award fully effective.

(iii) To settle all controversies regarding the Plan and Stock Awards granted under it.

(iv) To accelerate, in whole or in part, the time at which a Stock Award may be exercised or vest (or the time at which cash or shares of Common Stock may be issued in settlement thereof).

(v) To suspend or terminate the Plan at any time. Except as otherwise provided in the Plan or a Stock Award Agreement, suspension or termination of the Plan will not impair a Participant's rights under the Participant's then-outstanding Stock Award without the Participant's written consent except as provided in subsection (viii) below.

(vi) To amend the Plan in any respect the Board deems necessary or advisable, including, without limitation, by adopting amendments relating to Incentive Stock Options and certain nonqualified deferred compensation under Section 409A of the Code and/or bringing the Plan or Stock Awards granted under the Plan into compliance with the requirements for Incentive Stock Options or ensuring that they are exempt from, or compliant with, the requirements for nonqualified deferred compensation under Section 409A of the Code, subject to the limitations, if any, of applicable law. If required by applicable law or listing requirements, and except as provided in Section 9(a) relating to Capitalization Adjustments, the Company will seek stockholder approval of any amendment of the Plan that (A) materially increases the number of shares of Common Stock available for issuance under the Plan, (B) materially expands the class of individuals eligible to receive Stock Awards under the Plan, (C) materially increases the benefits accruing to Participants under the Plan, (D) materially reduces the price at which shares of Common Stock may be issued or purchased under the Plan, (E) materially extends the term of the Plan, or (F) materially expands the types of Stock Awards available for issuance under the Plan. Except as otherwise provided in the Plan or a Stock Award Agreement, no amendment of the Plan will materially impair a Participant's rights under an outstanding Stock Award without the Participant's written consent.

(vii) To submit any amendment to the Plan for stockholder approval, including, but not limited to, amendments to the Plan intended to satisfy the requirements of Section 422 of the Code regarding Incentive Stock Options.

(viii) To approve forms of Stock Award Agreements for use under the Plan and to amend the terms of any one or more Stock Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Stock Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided however*, that a Participant's rights under any Stock Award will not be impaired by any such amendment unless (A) the Company requests the consent of the affected Participant, and (B) such Participant consents in writing. Notwithstanding the foregoing, (1) a Participant's rights will not be deemed to have been impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant's rights, and (2) subject to the limitations of applicable law, if any, the Board may amend the terms of any one or more Stock Awards without the affected Participant's consent (A) to maintain the qualified status of the Stock Award as an Incentive Stock Option under Section 422 of the Code; (B) to change the terms of an Incentive Stock Option, if such change results in impairment of the Stock Award solely because it impairs the qualified status of the Stock Award as an Incentive Stock Option under Section 422 of the Code; (C) to clarify the manner of exemption from, or to bring the Stock Award into compliance with, Section 409A of the Code; or (D) to comply with other applicable laws.

(ix) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Stock Awards.

(x) To adopt such procedures and sub-plans as are necessary or appropriate to permit participation in the Plan by Employees, Directors or Consultants who are foreign nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Stock Award Agreement that are required for compliance with the laws of the relevant foreign jurisdiction).

(xi) To effect, with the consent of any adversely affected Participant, (A) the reduction of the exercise, purchase or strike price of any outstanding Stock Award; (B) the cancellation of any outstanding Stock Award and the grant in substitution therefor of a new (1) Option or SAR, (2) Restricted Stock Award, (3) Restricted Stock Unit Award, (4) Other Stock Award, (5) cash and/or (6) other valuable consideration determined by the Board, in its sole discretion, with any such substituted award (x) covering the same or a different number of shares of Common Stock as the cancelled Stock Award and (y) granted under the Plan or another equity or compensatory plan of the Company; or (C) any other action that is treated as a repricing under generally accepted accounting principles.

(c) **Delegation to Committee.** The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee, as applicable). Any delegation of administrative powers will be reflected in resolutions, not inconsistent with the provisions of the Plan, adopted from time to time by the Board or Committee (as applicable). The Board may retain the authority to concurrently administer the Plan with the Committee and may, at any time, revert in the Board some or all of the powers previously delegated.

(d) **Delegation to an Officer.** The Board may delegate to one or more Officers the authority to do one or both of the following: (i) designate Employees who are not Officers to be recipients of Options and SARs (and, to the extent permitted by applicable law, other Stock Awards) and, to the extent permitted by applicable law, the terms of such Stock Awards, and (ii) determine the number of shares of Common Stock to be subject to such Stock Awards granted to such Employees; *provided, however*, that the Board resolutions regarding such delegation will specify the total number of shares of Common Stock that may be subject to the Stock Awards granted by such Officer and that such Officer may not grant a Stock Award to himself or herself. Any such Stock Awards will be granted on the form of Stock Award Agreement most recently approved for use by the Committee or the Board, unless otherwise provided in the resolutions approving the delegation authority. The Board may not delegate authority to an Officer who is acting solely in the capacity of an Officer (and not also as a Director) to determine the Fair Market Value pursuant to Section 13(t) below.

(e) **Effect of Board's Decision.** All determinations, interpretations and constructions made by the Board in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. Shares Subject to the Plan.

(a) Share Reserve.

(i) Subject to Section 9(a) relating to Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Stock Awards from and after the Effective Date will not exceed 7,889,537 shares (the "**Share Reserve**").

(ii) For clarity, the Share Reserve in this Section 3(a) is a limitation on the number of shares of Common Stock that may be issued pursuant to the Plan. Accordingly, this Section 3(a) does not limit the granting of Stock Awards except as provided in Section 7(a).

(b) Reversion of Shares to the Share Reserve. If a Stock Award or any portion thereof (i) expires or otherwise terminates without all of the shares covered by such Stock Award having been issued or (ii) is settled in cash (*i.e.*, the Participant receives cash rather than stock), such expiration, termination or settlement will not reduce (or otherwise offset) the number of shares of Common Stock that may be available for issuance under the Plan. If any shares of Common Stock issued pursuant to a Stock Award are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required to vest such shares in the Participant, then the shares that are forfeited or repurchased will revert to and again become available for issuance under the Plan. Any shares reacquired by the Company in satisfaction of tax withholding obligations on a Stock Award or as consideration for the exercise or purchase price of a Stock Award will again become available for issuance under the Plan.

(c) Incentive Stock Option Limit. Subject to the Share Reserve and Section 9(a) relating to Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options will be a number of shares of Common Stock equal to three multiplied by the Share Reserve.

(d) Source of Shares. The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

4. Eligibility.

(a) Eligibility for Specific Stock Awards. Incentive Stock Options may be granted only to employees of the Company or a “parent corporation” or “subsidiary corporation” thereof (as such terms are defined in Sections 424(e) and 424(f) of the Code). Stock Awards other than Incentive Stock Options may be granted to Employees, Directors and Consultants; *provided, however*, that Stock Awards may not be granted to Employees, Directors and Consultants who are providing Continuous Service only to any “parent” of the Company, as such term is defined in Rule 405, unless (i) the stock underlying such Stock Awards is treated as “service recipient stock” under Section 409A of the Code (for example, because the Stock Awards are granted pursuant to a corporate transaction such as a spin off transaction), (ii) the Company, in consultation with its legal counsel, has determined that such Stock Awards are otherwise exempt from Section 409A of the Code, or (iii) the Company, in consultation with its legal counsel, has determined that such Stock Awards comply with the distribution requirements of Section 409A of the Code.

(b) Ten Percent Stockholders. A Ten Percent Stockholder will not be granted an Incentive Stock Option unless the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant and the Option is not exercisable after the expiration of five years from the date of grant.

(c) Consultants. A Consultant will not be eligible for the grant of a Stock Award if, at the time of grant, either the offer or sale of the Company’s securities to such Consultant is not exempt under Rule 701 because of the nature of the services that the Consultant is providing to the Company, because the Consultant is not a natural person, or because of any other provision of Rule 701, unless the Company determines that such grant need not comply with the requirements of Rule 701 and will satisfy another exemption under the Securities Act as well as comply with the securities laws of all other relevant jurisdictions.

5. Provisions Relating to Options and Stock Appreciation Rights.

Each Option or SAR will be in such form and will contain such terms and conditions as the Board deems appropriate. All Options will be separately designated Incentive Stock Options or Nonstatutory Stock Options at the time of grant, and, if certificates are issued, a separate certificate or certificates will be issued for shares of Common Stock purchased on exercise of each type of Option. If an Option is not specifically designated as an Incentive Stock Option, or if an Option is designated as an Incentive Stock Option but some portion or all of the Option fails to qualify as an Incentive Stock Option under the applicable rules, then the Option (or portion thereof) will be a Nonstatutory Stock Option. The provisions of separate Options or SARs need not be identical; *provided, however*, that each Stock Award Agreement will conform to (through incorporation of provisions hereof by reference in the applicable Stock Award Agreement or otherwise) the substance of each of the following provisions:

(a) Term. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of 10 years from the date of its grant or such shorter period specified in the Stock Award Agreement.

(b) Exercise Price. Subject to the provisions of Section 4(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will be not less than 100% of the Fair Market Value of the Common Stock subject to the Option or SAR on the date the Stock Award is granted. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value of the Common Stock subject to the Stock Award if such Stock Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Section 409A of the Code and, if applicable, Section 424(a) of the Code. Each SAR will be denominated in shares of Common Stock equivalents.

(c) Purchase Price for Options. The purchase price of Common Stock acquired pursuant to the exercise of an Option may be paid, to the extent permitted by applicable law and as determined by the Board in its sole discretion, by any combination of the methods of payment set forth below. The Board will have the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to use a particular method of payment. The permitted methods of payment are as follows:

(i) by cash, check, bank draft, electronic funds transfer or money order payable to the Company;

(ii) subject to Company and/or Board consent at the time of exercise and provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a “broker-assisted exercise”, “same day sale”, or “sell to cover”;

(iii) subject to Company and/or Board consent at the time of exercise and provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock; that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. “Delivery” for these purposes, in the sole discretion of the Company and/or the Board, at the time Participant exercises their Option, will include delivery to the Company of Participant’s attestation of ownership of such shares of Common Stock in a form approved by the Company. Participant may not exercise their option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company’s stock;

(iv) subject to Company and/or Board consent at the time of exercise, and provided that the Option is a Nonstatutory Stock Option, by a “net exercise” arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of the Option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price plus, to the extent permitted by the Company and/or Board at the time of exercise, the aggregate withholding obligations in respect of the Option exercise; provided, further that Participant must pay any remaining balance of the aggregate exercise price not satisfied by the “net exercise” in cash or other permitted form of payment. Shares of Common Stock will no longer be subject to the Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the “net exercise,” (B) shares are delivered to the Participant as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations;

(v) according to a deferred payment or similar arrangement with the Optionholder; *provided, however*, that interest will compound at least annually and will be charged at the minimum rate of interest necessary to avoid (A) the imputation of interest income to the Company and compensation income to the Optionholder under any applicable provisions of the Code, and (B) the classification of the Option as a liability for financial accounting purposes; or

(vi) in any other form of legal consideration that may be acceptable to the Board.

(d) Exercise and Payment of a SAR. To exercise any outstanding SAR, the Participant must provide written notice of exercise to the Company in compliance with the provisions of the Stock Appreciation Right Agreement evidencing such SAR. The appreciation distribution payable on the exercise of a SAR will be not greater than an amount equal to the excess of (A) the aggregate Fair Market Value (on the date of the exercise of the SAR) of a number of shares of Common Stock equal to the number of Common Stock equivalents in which the Participant is vested under such SAR, and with respect to which the Participant is exercising the SAR on such date, over (B) the aggregate strike price of the number of Common Stock equivalents with respect to which the Participant is exercising the SAR on such date. The appreciation distribution may be paid in Common Stock, in cash, in any combination of the two or in any other form of consideration, as determined by the Board and contained in the Stock Award Agreement evidencing such SAR.

(e) Transferability of Options and SARs. The Board may, in its sole discretion, impose such limitations on the transferability of Options and SARs as the Board will determine. In the absence of such a determination by the Board to the contrary, the following restrictions on the transferability of Options and SARs will apply:

(i) Restrictions on Transfer. An Option or SAR will not be transferable except by will or by the laws of descent and distribution (or pursuant to subsections (ii) and (iii) below), and will be exercisable during the lifetime of the Participant only by the Participant. The Board may permit transfer of the Option or SAR in a manner that is not prohibited by applicable tax and securities laws. Except as explicitly provided in the Plan, neither an Option nor a SAR may be transferred for consideration.

(ii) Domestic Relations Orders. Subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2). If an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(iii) Beneficiary Designation. Subject to the approval of the Board or a duly authorized Officer, a Participant may, by delivering written notice to the Company, in a form approved by the Company (or the designated broker), designate a third party who, upon the death of the Participant, will thereafter be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, upon the death of the Participant, the executor or administrator of the Participant's estate will be entitled to exercise the Option or SAR and receive the Common Stock or other consideration resulting from such exercise. However, the Company may prohibit designation of a beneficiary at any time, including due to any conclusion by the Company that such designation would be inconsistent with the provisions of applicable laws.

(f) Vesting Generally. The total number of shares of Common Stock subject to an Option or SAR may vest and therefore become exercisable in periodic installments that may or may not be equal. The Option or SAR may be subject to such other terms and conditions on the time or times when it may or may not be exercised (which may be based on the satisfaction of performance goals or other criteria) as the Board may deem appropriate. The vesting provisions of individual Options or SARs may vary. The provisions of this Section 5(f) are subject to any Option or SAR provisions governing the minimum number of shares of Common Stock as to which an Option or SAR may be exercised.

(g) Termination of Continuous Service. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates (other than for Cause and other than upon the Participant's death or Disability), the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Stock Award as of the date of termination of Continuous Service) within the period of time ending on the earlier of (i) the date three months following the termination of the Participant's Continuous Service (or such longer or shorter period specified in the applicable Stock Award Agreement, which period will not be less than 30 days if necessary to comply with applicable laws unless such termination is for Cause) and (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR (as applicable) within the applicable time frame, the Option or SAR will terminate.

(h) Extension of Termination Date. If the exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause and other than upon the Participant's death or Disability) would be prohibited at any time solely because the issuance of shares of Common Stock would violate the registration requirements under the Securities Act, then the Option or SAR will terminate on the earlier of (i) the expiration of a total period of time (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the exercise of the Option or SAR would not be in violation of such registration requirements, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement. In addition, unless otherwise provided in a Participant's Stock Award Agreement, if the sale of any Common Stock received upon exercise of an Option or SAR following the termination of the Participant's Continuous Service (other than for Cause) would violate the Company's insider trading policy, then the Option or SAR will terminate on the earlier of (i) the expiration of the period of time (that need not be consecutive) equal to the applicable post-termination exercise period after the termination of the Participant's Continuous Service during which the sale of the Common Stock received upon exercise of the Option or SAR would not be in violation of the Company's insider trading policy, and (ii) the expiration of the term of the Option or SAR as set forth in the applicable Stock Award Agreement.

(i) Disability of Participant. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if a Participant's Continuous Service terminates as a result of the Participant's Disability, the Participant may exercise his or her Option or SAR (to the extent that the Participant was entitled to exercise such Option or SAR as of the date of

termination of Continuous Service), but only within such period of time ending on the earlier of (i) the date 12 months following such termination of Continuous Service (or such longer or shorter period specified in the Stock Award Agreement, which period will not be less than six months if necessary to comply with applicable laws unless such termination is for Cause), and (ii) the expiration of the term of the Option or SAR as set forth in the Stock Award Agreement. If, after termination of Continuous Service, the Participant does not exercise his or her Option or SAR within the applicable time frame, the Option or SAR (as applicable) will terminate.

(j) Death of Participant. Except as otherwise provided in the applicable Stock Award Agreement or other agreement between the Participant and the Company, if (i) a Participant's Continuous Service terminates as a result of the Participant's death, or (ii) the Participant dies within the period (if any) specified in the Stock Award Agreement for exercisability after the termination of the Participant's Continuous Service (for a reason other than death), then the Option or SAR may be exercised (to the extent the Participant was entitled to exercise such Option or SAR as of the date of death) by the Participant's estate, by a person who acquired the right to exercise the Option or SAR by bequest or inheritance or by a person designated to exercise the Option or SAR upon the Participant's death, but only within the period ending on the earlier of (i) the date 18 months following the date of death (or such longer or shorter period specified in the Stock Award Agreement, which period will not be less than six months if necessary to comply with applicable laws unless such termination is for Cause), and (ii) the expiration of the term of such Option or SAR as set forth in the Stock Award Agreement. If, after the Participant's death, the Option or SAR is not exercised within the applicable time frame, the Option or SAR (as applicable) will terminate.

(k) Termination for Cause. Except as explicitly provided otherwise in a Participant's Stock Award Agreement or other individual written agreement between the Company or any Affiliate and the Participant, if a Participant's Continuous Service is terminated for Cause, the Option or SAR will terminate immediately upon such Participant's termination of Continuous Service, and the Participant will be prohibited from exercising his or her Option or SAR (whether vested or unvested) from and after the date of such termination of Continuous Service.

(l) Non-Exempt Employees. If an Option or SAR is granted to an Employee who is a non-exempt employee for purposes of the Fair Labor Standards Act of 1938, as amended, the Option or SAR will not be first exercisable for any shares of Common Stock until at least six months following the date of grant of the Option or SAR (although the Stock Award may vest prior to such date). Consistent with the provisions of the Worker Economic Opportunity Act, (i) if such non-exempt Employee dies or suffers a Disability, (ii) upon a Corporate Transaction in which such Option or SAR is not assumed, continued, or substituted, (iii) upon a Change in Control, or (iv) upon the Participant's retirement (as such term may be defined in the Participant's Stock Award Agreement, in another agreement between the Participant and the Company, or, if no such definition, in accordance with the Company's then current employment policies and guidelines), the vested portion of any Options and SARs may be exercised earlier than six months following the date of grant. The foregoing provision is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay. To the extent permitted and/or required for compliance with the Worker Economic Opportunity Act to ensure that any income derived by a non-exempt employee in connection with the exercise, vesting or issuance of any shares under any other Stock Award will be exempt from the employee's regular rate of pay, the provisions of this Section 5(l) will apply to all Stock Awards and are hereby incorporated by reference into such Stock Award Agreements.

(m) Early Exercise of Options. An Option may, but need not, include a provision whereby the Optionholder may elect at any time before the Optionholder's Continuous Service terminates to exercise the Option as to any part or all of the shares of Common Stock subject to the Option prior to the full vesting of the Option. Subject to the "Repurchase Limitation" in Section 8(l), any unvested shares of Common

Stock so purchased may be subject to a repurchase right in favor of the Company or to any other restriction the Board determines to be appropriate. Provided that the "Repurchase Limitation" in Section 8(l) is not violated, the Company will not be required to exercise its repurchase right until at least six months (or such longer or shorter period of time required to avoid classification of the Option as a liability for financial accounting purposes) have elapsed following exercise of the Option unless the Board otherwise specifically provides in the Option Agreement.

(n) Right of Repurchase. Subject to the "Repurchase Limitation" in Section 8(l), the Option or SAR may include a provision whereby the Company may elect to repurchase all or any part of the vested shares of Common Stock acquired by the Participant pursuant to the exercise of the Option or SAR.

(o) Right of First Refusal. The Option or SAR may include a provision whereby the Company may elect to exercise a right of first refusal following receipt of notice from the Participant of the intent to transfer all or any part of the shares of Common Stock received upon the exercise of the Option or SAR. Such right of first refusal will be subject to the "Repurchase Limitation" in Section 8(l). Except as expressly provided in this Section 5(o) or in the Stock Award Agreement, such right of first refusal will otherwise comply with any applicable provisions of the Bylaws of the Company (as may be amended, the "Bylaws").

6. Provisions of Stock Awards Other than Options and SARs.

(a) Restricted Stock Awards. Each Restricted Stock Award Agreement will be in such form and will contain such terms and conditions as the Board will deem appropriate. To the extent consistent with the Bylaws, at the Board's election, shares of Common Stock underlying a Restricted Stock Award may be (i) held in book entry form subject to the Company's instructions until any restrictions relating to the Restricted Stock Award lapse; or (ii) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. The terms and conditions of Restricted Stock Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Award Agreements need not be identical. Each Restricted Stock Award Agreement will conform to (through incorporation of the provisions hereof by reference in the agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. A Restricted Stock Award may be awarded in consideration for (A) cash, check, bank draft or money order payable to the Company, (B) past services to the Company or an Affiliate, or (C) any other form of legal consideration (including future services) that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. Subject to the "Repurchase Limitation" in Section 8(l), shares of Common Stock awarded under the Restricted Stock Award Agreement may be subject to forfeiture to the Company in accordance with a vesting schedule to be determined by the Board.

(iii) Termination of Participant's Continuous Service. If a Participant's Continuous Service terminates, the Company may receive through a forfeiture condition or a repurchase right, any or all of the shares of Common Stock held by the Participant that have not vested as of the date of termination of Continuous Service under the terms of the Restricted Stock Award Agreement.

(iv) Transferability. Rights to acquire shares of Common Stock under the Restricted Stock Award Agreement will be transferable by the Participant only upon such terms and conditions as are set forth in the Restricted Stock Award Agreement, as the Board will determine in its sole discretion, so long as Common Stock awarded under the Restricted Stock Award Agreement remains subject to the terms of the Restricted Stock Award Agreement.

(v) Dividends. A Restricted Stock Award Agreement may provide that any dividends paid on Restricted Stock will be subject to the same vesting and forfeiture restrictions as apply to the shares subject to the Restricted Stock Award to which they relate.

(b) Restricted Stock Unit Awards. Each Restricted Stock Unit Award Agreement will be in such form and will contain such terms and conditions as the will Board deem appropriate. The terms and conditions of Restricted Stock Unit Award Agreements may change from time to time, and the terms and conditions of separate Restricted Stock Unit Award Agreements need not be identical. Each Restricted Stock Unit Award Agreement will conform to (through incorporation of the provisions hereof by reference in the Agreement or otherwise) the substance of each of the following provisions:

(i) Consideration. At the time of grant of a Restricted Stock Unit Award, the Board will determine the consideration, if any, to be paid by the Participant upon delivery of each share of Common Stock subject to the Restricted Stock Unit Award. The consideration to be paid (if any) by the Participant for each share of Common Stock subject to a Restricted Stock Unit Award may be paid in any form of legal consideration that may be acceptable to the Board, in its sole discretion, and permissible under applicable law.

(ii) Vesting. At the time of the grant of a Restricted Stock Unit Award, the Board may impose such restrictions on or conditions to the vesting of the Restricted Stock Unit Award as it, in its sole discretion, deems appropriate.

(iii) Payment. A Restricted Stock Unit Award may be settled by the delivery of shares of Common Stock, their cash equivalent, any combination thereof or in any other form of consideration, as determined by the Board and contained in the Restricted Stock Unit Award Agreement.

(iv) Additional Restrictions. At the time of the grant of a Restricted Stock Unit Award, the Board, as it deems appropriate, may impose such restrictions or conditions that delay the delivery of the shares of Common Stock (or their cash equivalent) subject to a Restricted Stock Unit Award to a time after the vesting of such Restricted Stock Unit Award.

(v) Dividend Equivalents. Dividend equivalents may be credited in respect of shares of Common Stock covered by a Restricted Stock Unit Award, as determined by the Board and contained in the Restricted Stock Unit Award Agreement. At the sole discretion of the Board, such dividend equivalents may be converted into additional shares of Common Stock covered by the Restricted Stock Unit Award in such manner as determined by the Board. Any additional shares covered by the Restricted Stock Unit Award credited by reason of such dividend equivalents will be subject to all of the same terms and conditions of the underlying Restricted Stock Unit Award Agreement to which they relate.

(vi) Termination of Participant's Continuous Service. Except as otherwise provided in the applicable Restricted Stock Unit Award Agreement, such portion of the Restricted Stock Unit Award that has not vested will be forfeited upon the Participant's termination of Continuous Service.

(vii) Compliance with Section 409A of the Code. Notwithstanding anything to the contrary set forth herein, any Restricted Stock Unit Award granted under the Plan that is not exempt from the requirements of Section 409A of the Code will contain such provisions so that such Restricted Stock Unit Award will comply with the requirements of Section 409A of the Code. Such restrictions, if any, will be determined by the Board and contained in the Restricted Stock Unit Award Agreement evidencing such Restricted Stock Unit Award. For example, such restrictions may include, without limitation, a requirement that any Common Stock that is to be issued in a year following the year in which the Restricted Stock Unit Award vests must be issued in accordance with a fixed pre-determined schedule.

(c) Other Stock Awards. Other forms of Stock Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof (e.g., options or stock rights with an exercise price or strike price less than 100% of the Fair Market Value of the Common Stock at the time of grant) may be granted either alone or in addition to Stock Awards provided for under Section 5 and the preceding provisions of this Section 6. Subject to the provisions of the Plan, the Board will have sole and complete authority to determine the persons to whom and the time or times at which such Other Stock Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Stock Awards and all other terms and conditions of such Other Stock Awards.

7. Covenants of the Company.

(a) Availability of Shares. The Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy then-outstanding Stock Awards.

(b) Securities Law Compliance. The Company will seek to obtain from each regulatory commission or agency having jurisdiction over the Plan such authority as may be required to grant Stock Awards and to issue and sell shares of Common Stock upon exercise of the Stock Awards; *provided, however,* that this undertaking will not require the Company to register under the Securities Act the Plan, any Stock Award or any Common Stock issued or issuable pursuant to any such Stock Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise of such Stock Awards unless and until such authority is obtained. A Participant will not be eligible for the grant of a Stock Award or the subsequent issuance of cash or Common Stock pursuant to the Stock Award if such grant or issuance would be in violation of any applicable securities law.

(c) No Obligation to Notify or Minimize Taxes. The Company will have no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Stock Award. Furthermore, the Company will have no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of a Stock Award or a possible period in which the Stock Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of a Stock Award to the holder of such Stock Award.

8. Miscellaneous.

(a) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Stock Awards will constitute general funds of the Company.

(b) Corporate Action Constituting Grant of Stock Awards. Corporate action constituting a grant by the Company of a Stock Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Stock Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action constituting the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Stock Award Agreement or related grant documents as a result of a clerical error in the papering of the Stock Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Stock Award Agreement or related grant documents.

(c) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to a Stock Award unless and until (i) such Participant has satisfied all requirements for exercise of, or the issuance of shares of Common Stock under, the Stock Award pursuant to its terms, and (ii) the issuance of the Common Stock subject to the Stock Award has been entered into the books and records of the Company.

(d) No Employment or Other Service Rights. Nothing in the Plan, any Stock Award Agreement or any other instrument executed thereunder or in connection with any Stock Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Stock Award was granted or will affect the right of the Company or an Affiliate to terminate (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws or an Affiliate's bylaws, and any applicable provisions of the corporate law of the state in which the Company or the Affiliate is incorporated, as the case may be.

(e) Change in Time Commitment. In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Stock Award to the Participant, the Board has the right in its sole discretion to (x) make a corresponding reduction in the number of shares subject to any portion of such Stock Award that is scheduled to vest or become payable after the date of such change in time commitment, and (y) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Stock Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Stock Award that is so reduced or extended.

(f) Incentive Stock Option Limitations. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(g) Investment Assurances. The Company may require a Participant, as a condition of exercising or acquiring Common Stock under any Stock Award, (i) to give written assurances satisfactory to the Company as to the Participant's knowledge and experience in financial and business matters and/or to employ a purchaser representative reasonably satisfactory to the Company who is knowledgeable and experienced in financial and business matters and that the Participant is capable of evaluating, alone or together with the purchaser representative, the merits and risks of exercising the Stock Award; and (ii) to give written assurances satisfactory to the Company stating that the Participant is acquiring Common Stock subject to the Stock Award for the Participant's own account and not with any present intention of selling or otherwise distributing the Common Stock. The foregoing requirements, and any assurances given pursuant to such requirements, will be inoperative if (A) the issuance of the shares upon the exercise or acquisition of Common Stock under the Stock Award has been registered under a then currently effective registration statement under the Securities Act, or (B) as to any particular requirement, a determination is made by counsel for the Company that such requirement need not be met in the circumstances under the then applicable securities laws. The Company may, upon advice of counsel to the Company, place legends on stock certificates issued under the Plan as such counsel deems necessary or appropriate in order to comply with applicable securities laws, including, but not limited to, legends restricting the transfer of the Common Stock.

(h) Withholding Obligations. Unless prohibited by the terms of a Stock Award Agreement, the Company may, in its sole discretion, satisfy any federal, state or local tax withholding obligation relating to a Stock Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Stock Award; *provided, however*, that no shares of Common Stock are withheld with a value exceeding the maximum amount of tax required to be withheld by law (or such lesser amount as may be necessary to avoid classification of the Stock Award as a liability for financial accounting purposes); (iii) withholding cash from a Stock Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; or (v) by such other method as may be set forth in the Stock Award Agreement.

(i) Electronic Delivery. Any reference herein to a “written” agreement or document will include any agreement or document delivered electronically or posted on the Company’s intranet (or other shared electronic medium controlled by the Company to which the Participant has access).

(j) Deferrals. To the extent permitted by applicable law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Stock Award may be deferred and may establish programs and procedures for deferral elections to be made by Participants. Deferrals by Participants will be made in accordance with Section 409A of the Code. Consistent with Section 409A of the Code, the Board may provide for distributions while a Participant is still an employee or otherwise providing services to the Company. The Board is authorized to make deferrals of Stock Awards and determine when, and in what annual percentages, Participants may receive payments, including lump sum payments, following the Participant’s termination of Continuous Service, and implement such other terms and conditions consistent with the provisions of the Plan and in accordance with applicable law.

(k) Compliance with Section 409A of the Code. To the extent that the Board determines that any Stock Award granted hereunder is subject to Section 409A of the Code, the Stock Award Agreement evidencing such Stock Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code. To the extent applicable, the Plan and Stock Award Agreements will be interpreted in accordance with Section 409A of the Code. Notwithstanding anything to the contrary in the Plan (and unless the Stock Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding a Stock Award that constitutes “deferred compensation” under Section 409A of the Code is a “specified employee” for purposes of Section 409A of the Code, no distribution or payment of any amount that is due because of a “separation from service” (as defined in Section 409A of the Code without regard to alternative definitions thereunder) will be issued or paid before the date that is six months following the date of such Participant’s “separation from service” (as defined in Section 409A of the Code without regard to alternative definitions thereunder) or, if earlier, the date of the Participant’s death, unless such distribution or payment can be made in a manner that complies with Section 409A of the Code, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(l) Repurchase Limitation. The terms of any repurchase right will be specified in the Stock Award Agreement. The repurchase price for vested shares of Common Stock will be the Fair Market Value of the shares of Common Stock on the date of repurchase. The repurchase price for unvested shares of Common Stock will be the lower of (i) the Fair Market Value of the shares of Common Stock on the date of repurchase or (ii) their original purchase price. However, the Company will not exercise its repurchase right until at least six months (or such longer or shorter period of time necessary to avoid classification of the Stock Award as a liability for financial accounting purposes) have elapsed following delivery of shares of Common Stock subject to the Stock Award, unless otherwise specifically provided by the Board.

9. Adjustments upon Changes in Common Stock; Other Corporate Events.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 3(c), and (iii) the class(es) and number of securities and price per share of stock subject to outstanding Stock Awards. The Board will make such adjustments, and its determination will be final, binding and conclusive.

(b) Dissolution or Liquidation. Except as otherwise provided in the Stock Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Stock Awards (other than Stock Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Stock Award is providing Continuous Service, *provided, however*, that the Board may, in its sole discretion, cause some or all Stock Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Stock Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) Corporate Transaction. The following provisions will apply to Stock Awards in the event of a Corporate Transaction unless otherwise provided in the instrument evidencing the Stock Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of a Stock Award. In the event of a Corporate Transaction, then, notwithstanding any other provision of the Plan, the Board may take one or more of the following actions with respect to Stock Awards, contingent upon the closing or completion of the Corporate Transaction:

(i) arrange for the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) to assume or continue the Stock Award or to substitute a similar stock award for the Stock Award (including, but not limited to, an award to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction);

(ii) arrange for the assignment of any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to the Stock Award to the surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company);

(iii) accelerate the vesting, in whole or in part, of the Stock Award (and, if applicable, the time at which the Stock Award may be exercised) to a date prior to the effective time of such Corporate Transaction as the Board determines (or, if the Board does not determine such a date, to the date that is five days prior to the effective date of the Corporate Transaction), with such Stock Award terminating if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction; *provided, however*, that the Board may require Participants to complete and deliver to the Company a notice of exercise before the effective date of a Corporate Transaction, which exercise is contingent upon the effectiveness of such Corporate Transaction;

(iv) arrange for the lapse, in whole or in part, of any reacquisition or repurchase rights held by the Company with respect to the Stock Award;

(v) cancel or arrange for the cancellation of the Stock Award, to the extent not vested or not exercised prior to the effective time of the Corporate Transaction, in exchange for such cash consideration (including no consideration) as the Board, in its sole discretion, may consider appropriate; and

(vi) make a payment, in such form as may be determined by the Board equal to the excess, if any, of (A) the value of the property the Participant would have received upon the exercise of the Stock Award immediately prior to the effective time of the Corporate Transaction, over (B) any exercise price payable by such holder in connection with such exercise. For clarity, this payment may be zero (\$0) if the value of the property is equal to or less than the exercise price. Payments under this provision may be delayed to the same extent that payment of consideration to the holders of the Company's Common Stock in connection with the Corporate Transaction is delayed as a result of escrows, earn outs, holdbacks or any other contingencies.

The Board need not take the same action or actions with respect to all Stock Awards or portions thereof or with respect to all Participants. The Board may take different actions with respect to the vested and unvested portions of a Stock Award.

(d) Change in Control. A Stock Award may be subject to additional acceleration of vesting and exercisability upon or after a Change in Control as may be provided in the Stock Award Agreement for such Stock Award or as may be provided in any other written agreement between the Company or any Affiliate and the Participant, but in the absence of such provision, no such acceleration will occur.

10. Plan Term; Earlier Termination or Suspension of the Plan.

(a) Plan Term. The Board may suspend or terminate the Plan at any time. Unless terminated sooner by the Board, the Plan will automatically terminate on the day before the 10th anniversary of the earlier of (i) the date the Plan is adopted by the Board, or (ii) the date the Plan is approved by the stockholders of the Company. No Stock Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

(b) No Impairment of Rights. Suspension or termination of the Plan will not impair rights and obligations under any Stock Award granted while the Plan is in effect except with the written consent of the affected Participant or as otherwise permitted in the Plan.

11. Effective Date of Plan.

This Plan will become effective on the Effective Date.

12. Choice of Law.

The laws of the State of Delaware will govern all questions concerning the construction, validity and interpretation of this Plan, without regard to that state's conflict of laws rules.

13. Definitions. As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) “**Affiliate**” means, at the time of determination, any “parent” or “majority-owned subsidiary” of the Company, as such terms are defined in Rule 405. The Board will have the authority to determine the time or times at which “parent” or “majority-owned subsidiary” status is determined within the foregoing definition.

(b) “**Board**” means the Board of Directors of the Company.

(c) “**Capitalization Adjustment**” means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Stock Award after the Effective Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure, or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(d) “**Cause**” will have the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant’s commission of any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (ii) such Participant’s attempted commission of, or participation in, a fraud or act of dishonesty against the Company, or any of its employees or directors; (iii) such Participant’s intentional, material violation of any contract or agreement between the Participant and the Company, the Company’s employment policies, or of any statutory or other duty owed to the Company; (iv) such Participant’s unauthorized use or disclosure of the Company’s confidential information or trade secrets; or (v) such Participant’s gross misconduct. The determination that a termination of the Participant’s Continuous Service is either for Cause or without Cause will be made by the Company, in its sole discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Stock Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(e) “**Change in Control**” means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control will not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company’s securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities or (C) solely because the level of Ownership held by any Exchange Act Person (the “**Subject Person**”) exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control will be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the surviving Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the surviving Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction; or

(iii) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition.

Notwithstanding the foregoing definition or any other provision of this Plan, (A) the term Change in Control will not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant will supersede the foregoing definition with respect to Stock Awards subject to such agreement; *provided, however*, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the definition set forth herein will apply, and (C) if at any time the Company's Certificate of Incorporation (as may be amended from time to time) provides definitions of various analogous transactions that would be deemed a liquidation event for the Company, then such definition will apply as if it were the definition set forth herein except as is otherwise expressly provided in an individual written agreement between the Company or any Affiliate and the Participant.

(f) "**Code**" means the Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(g) "**Committee**" means a committee of one or more Directors to whom authority has been delegated by the Board in accordance with Section 2(c).

(h) "**Common Stock**" means the common stock of the Company.

(i) "**Company**" means Artiva Biotherapeutics, Inc., a Delaware corporation.

(j) "**Consultant**" means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a "Consultant" for purposes of the Plan.

(k) “**Continuous Service**” means that the Participant’s service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s service with the Company or an Affiliate, will not terminate a Participant’s Continuous Service; *provided, however*, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board in its sole discretion, such Participant’s Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by law, the Board or the chief executive officer of the Company, in that party’s sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Board or chief executive officer, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in a Stock Award only to such extent as may be provided in the Company’s leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by law.

(l) “**Corporate Transaction**” means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of more than 50% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(m) “**Director**” means a member of the Board.

(n) “**Disability**” means, with respect to a Participant, the inability of such Participant to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment that can be expected to result in death or that has lasted or can be expected to last for a continuous period of not less than twelve (12) months as provided in Sections 22(e)(3) and 409A(a)(2)(c)(i) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(o) “**Effective Date**” means the effective date of this Plan, which is the earlier of (i) the date that this Plan is first approved by the Company’s stockholders, and (ii) the date this Plan is adopted by the Board.

(p) “**Employee**” means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an “Employee” for purposes of the Plan.

(q) “**Entity**” means a corporation, partnership, limited liability company or other entity.

(r) “**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(s) “**Exchange Act Person**” means any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that “Exchange Act Person” will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities.

(t) “**Fair Market Value**” means, as of any date, the value of the Common Stock determined by the Board in compliance with Section 409A of the Code or, in the case of an Incentive Stock Option, in compliance with Section 422 of the Code.

(u) “**Good Reason**” has the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, means any of the following actions taken by the Company or a successor corporation or entity, with respect to a Participant, without the consent of such Participant (unless such action is taken in response to conduct by such Participant that constitutes Cause): (1) material reduction of the Participant’s base compensation, other than a reduction that applies generally to all employees of an approximately similar level (e.g., executives, vice presidents, director positions); (2) material reduction in such Participant’s authority, duties or responsibilities; provided, however, that a change in job position (including a change in title) will not be deemed a “material reduction” unless the Participant’s new authority, duties or responsibilities are materially reduced from the prior authority, duties or responsibilities; (3) failure or refusal of a successor to the Company to materially assume the Company’s obligations under each material agreement between such Participant and the Company in the event of a Change in Control; or (4) relocation of such Participant’s principal place of employment that results in an increase in the a Participant’s one-way driving distance by more than 50 miles from such Participant’s then current principal residence. In order to resign for Good Reason, a Participant must provide written notice of the event giving rise to Good Reason to the Board within 90 days after the condition arises, allow the Company 30 days to cure such condition, and if the Company fails to cure the condition within such period, the Participant’s resignation from all positions such Participant then holds with the Company must be effective not later than 90 days after the end of the Company’s cure period.

(v) “**Incentive Stock Option**” means an option granted pursuant to Section 5 of the Plan that is intended to be, and that qualifies as, an “incentive stock option” within the meaning of Section 422 of the Code.

(w) “**Nonstatutory Stock Option**” means an option granted pursuant to Section 5 of the Plan that does not qualify as an Incentive Stock Option.

(x) “**Officer**” means any person designated by the Company as an officer.

(y) “**Option**” means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(z) “**Option Agreement**” means a written agreement between the Company and an Optionholder evidencing the terms and conditions of an Option grant. Each Option Agreement will be subject to the terms and conditions of the Plan.

(aa) “**Optionholder**” means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(bb) “**Other Stock Award**” means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 6(c).

(cc) “**Other Stock Award Agreement**” means a written agreement between the Company and a holder of an Other Stock Award evidencing the terms and conditions of an Other Stock Award grant. Each Other Stock Award Agreement will be subject to the terms and conditions of the Plan.

(dd) “**Own**,” “**Owned**,” “**Owner**,” “**Ownership**” A person or Entity will be deemed to “Own,” to have “Owned,” to be the “Owner” of, or to have acquired “Ownership” of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(ee) “**Participant**” means a person to whom a Stock Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Stock Award.

(ff) “**Plan**” means this 2020 Equity Incentive Plan.

(gg) “**Restricted Stock Award**” means an award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(a).

(hh) “**Restricted Stock Award Agreement**” means a written agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

(ii) “**Restricted Stock Unit Award**” means a right to receive shares of Common Stock which is granted pursuant to the terms and conditions of Section 6(b).

(jj) “**Restricted Stock Unit Award Agreement**” means a written agreement between the Company and a holder of a Restricted Stock Unit Award evidencing the terms and conditions of a Restricted Stock Unit Award grant. Each Restricted Stock Unit Award Agreement will be subject to the terms and conditions of the Plan.

(kk) “**Rule 405**” means Rule 405 promulgated under the Securities Act.

(ll) “**Rule 701**” means Rule 701 promulgated under the Securities Act.

(mm) “**Securities Act**” means the Securities Act of 1933, as amended.

(nn) “**Stock Appreciation Right**” or “**SAR**” means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 5.

(oo) “Stock Appreciation Right Agreement” means a written agreement between the Company and a holder of a Stock Appreciation Right evidencing the terms and conditions of a Stock Appreciation Right grant. Each Stock Appreciation Right Agreement will be subject to the terms and conditions of the Plan.

(pp) “Stock Award” means any right to receive Common Stock granted under the Plan, including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, a Restricted Stock Unit Award, a Stock Appreciation Right or any Other Stock Award.

(qq) “Stock Award Agreement” means a written agreement between the Company and a Participant evidencing the terms and conditions of a Stock Award grant. Each Stock Award Agreement will be subject to the terms and conditions of the Plan.

(rr) “Subsidiary” means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

(ss) “Ten Percent Stockholder” means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

ARTIVA BIOTHERAPEUTICS, INC.

STOCK OPTION GRANT NOTICE
(2020 EQUITY INCENTIVE PLAN)

Artiva Biotherapeutics, Inc. (the “**Company**”), pursuant to its 2020 Equity Incentive Plan (as may be amended and/or restated from time to time, the “**Plan**”), has granted to Optionholder an option to purchase the number of shares of the Common Stock set forth below (the “**Option**”). The Option is subject to all of the terms and conditions as set forth in this Stock Option Grant Notice (the “**Grant Notice**”) and in the Plan, the Option Agreement, and the Notice of Exercise, all of which are attached to this Grant Notice and incorporated into this Grant Notice in their entirety. Capitalized terms not explicitly defined in this Grant Notice but defined in the Plan or the Option Agreement shall have the meanings set forth in the Plan or the Option Agreement, as applicable. If the Company uses an electronic capitalization table system (such as Carta or Shareworks) and the fields below are blank or the information is otherwise provided in a different format electronically, the blank fields and other information (such as exercise schedule and type of grant) shall be deemed to come from the electronic capitalization system and is considered part of this Grant Notice.

Optionholder:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares Subject to Option:	_____
Exercise Price (Per Share) ¹ :	_____
Total Exercise Price:	_____
Expiration Date:	_____
Exercise Schedule:	Same as Vesting Schedule
Type of Grant ² :	[Incentive Stock Option] [Nonstatutory Stock Option]
Grant Number:	_____

Vesting Schedule: [Sample vesting schedule: 1/4th of the shares initially subject to the Option will vest on the first anniversary of the Vesting Commencement Date, and the balance of the shares subject to the Option shall vest at a rate of 1/36th per month over the following 36 months, in each case subject to the Optionholder continuing to provide Continuous Service.]

¹ The exercise price may be paid by one or a combination of the methods permitted in the Option Agreement.

² If this is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options) cannot be first exercisable for more than \$100,000 in value (measured by exercise price) in any calendar year. Any excess over \$100,000 is a Nonstatutory Stock Option.

Optionholder Acknowledgements: By Optionholder's signature below or by electronic acceptance or authentication in a form authorized by the Company, Optionholder understands and agrees that the Option is governed by this Stock Option Grant Notice, and the provisions of the Plan and the Option Agreement and the Notice of Exercise, all of which are made a part of this document.

By accepting this Option, Optionholder consents to receive this Grant Notice, the Option Agreement, the Plan, and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Optionholder represents that he or she has read and is familiar with the provisions of the Plan and the Option Agreement. Optionholder acknowledges and agrees that this Grant Notice and the Option Agreement may not be modified, amended or revised except in writing signed by Optionholder and a duly authorized officer of the Company.

Optionholder further acknowledges that in the event of any conflict between the provisions in this Grant Notice, the Option Agreement, the Notice of Exercise and the terms of the Plan, the terms of the Plan shall control. Optionholder further acknowledges that the Option Agreement sets forth the entire understanding between Optionholder and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of other equity awards previously granted to Optionholder and any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and Optionholder in each case that specifies the terms that should govern this Option.

Optionholder further acknowledges that this Grant Notice has been prepared on behalf of the Company by Cooley LLP, counsel to the Company and that Cooley LLP does not represent, and is not acting on behalf of, Optionholder in any capacity. Optionholder has been provided with an opportunity to consult with Optionholder's own counsel with respect to this Grant Notice.

This Grant Notice may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

Artiva Biotherapeutics, Inc.

By: _____
(Signature)

Title: _____
Date: _____

Optionholder:

By: _____
(Signature)

Email: _____
Date: _____

Attachments: Option Agreement, 2020 Equity Incentive Plan and Notice of Exercise

ATTACHMENT I
OPTION AGREEMENT

ARTIVA BIOTHERAPEUTICS, INC.

2020 Equity Incentive Plan

OPTION AGREEMENT
(INCENTIVE STOCK OPTION OR NONSTATUTORY STOCK OPTION)

Pursuant to your Stock Option Grant Notice (“**Grant Notice**”) and this Option Agreement, **Artiva Biotherapeutics, Inc.** (the “**Company**”) has granted you an option under its 2020 Equity Incentive Plan (the “**Plan**”) to purchase the number of shares of the Company’s Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. The option is granted to you effective as of the date of grant set forth in the Grant Notice (the “**Date of Grant**”). If there is any conflict between the terms in this Option Agreement and the Plan, the terms of the Plan will control. Capitalized terms not explicitly defined in this Option Agreement or in the Grant Notice but defined in the Plan will have the same definitions as in the Plan.

The details of your option, in addition to those set forth in the Grant Notice and the Plan, are as follows:

1. Vesting. Your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service.

2. Number of Shares and Exercise Price. The number of shares of Common Stock subject to your option and your exercise price per share in your Grant Notice will be adjusted for Capitalization Adjustments.

3. Exercise Restriction for Non-Exempt Employees. If you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (that is, a “**Non-Exempt Employee**”), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six months of Continuous Service measured from the Date of Grant, even if you have already been an employee for more than six months. Consistent with the provisions of the Worker Economic Opportunity Act, you may exercise your option as to any vested portion prior to such six month anniversary in the case of (i) your death or disability, (ii) a Corporate Transaction in which your option is not assumed, continued or substituted, (iii) a Change in Control or (iv) your termination of Continuous Service on your “retirement” (as defined in the Company’s benefit plans).

4. Exercise prior to Vesting (“Early Exercise**”).** If permitted in your Grant Notice (*i.e.*, the “Exercise Schedule” indicates “Early Exercise Permitted”) and subject to the provisions of your option, you may elect at any time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided, however*, that:

(a) a partial exercise of your option will be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;

(b) any shares of Common Stock so purchased from installments that have not vested as of the date of exercise will be subject to the purchase option in favor of the Company as described in the Company’s form of Early Exercise Stock Purchase Agreement;

(c) you will enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

(d) if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds \$100,000, your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) will be treated as Nonstatutory Stock Options.

5. Method of Payment. You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price as follows:

(a) By cash, check, bank draft, electronic funds transfer or money order payable to the Company;

(b) subject to Company and/or Board consent at the time of exercise and provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a "broker-assisted exercise", "same day sale", or "sell to cover";

(c) subject to Company and/or Board consent at the time of exercise and provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock;

(d) subject to Company and/or Board consent at the time of exercise, and provided that the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of the Option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price plus, to the extent permitted by the Company and/or Board at the time of exercise, the aggregate withholding obligations in respect of the Option exercise; provided, further that you must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be subject to the Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to you as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations;

(e) subject to the consent of the Company and/or Board at the time of exercise, according to a deferred payment or similar arrangement with you; *provided, however*, that interest will compound at least annually and will be charged at the minimum rate of interest necessary to avoid (A) the imputation of interest income to the Company and compensation income to the Optionholder under any applicable provisions of the Code, and (B) the classification of the Option as a liability for financial accounting purposes; or

(f) in any other form of legal consideration that may be acceptable to the Board.

6. Whole Shares. You may exercise your option only for whole shares of Common Stock.

7. Securities Law Compliance. In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).

8. Term. You may not exercise your option before the Date of Grant or after the expiration of the option's term. Except as set forth in your Grant Notice, the term of your option expires, subject to the provisions of Section 5(h) of the Plan, upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided, however*, that if during any part of such three month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three months after the termination of your Continuous Service; *provided further*, that if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven months after the Date of Grant, and (B) the date that is three months after the termination of your Continuous Service, and (y) the Expiration Date;

(c) 12 months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 8(d)) below;

(d) 18 months after your death if you die either during your Continuous Service or within three (3) months after your Continuous Service terminates for any reason other than Cause;

(e) the Expiration Date indicated in your Grant Notice; or

(f) the day before the 10th anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the Date of Grant and ending on the day three months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three months after the date your employment with the Company or an Affiliate terminates.

9. Exercise.

(a) You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by delivering a Notice of Exercise (in a form designated by the Company) together with the exercise price to the Secretary of the Company, or to such other person as the Company may designate, during regular business hours. If required by the Company, your exercise may be made contingent on your execution of any additional documents specified by the Company (including, without limitation, any voting agreement or other agreement between the Company and some or all of its stockholders).

(b) By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.

(c) If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two years after the Date of Grant or within one year after such shares of Common Stock are transferred upon exercise of your option.

(d) By exercising your option you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with applicable FINRA rules (the “**Lock-Up Period**”); *provided, however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 9(d). The underwriters of the Company’s stock are intended third party beneficiaries of this Section 9(d) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

10. Transferability. Except as otherwise provided in this Section 10, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.

(a) **Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.

(b) Domestic Relations Orders. Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(c) Beneficiary Designation. Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form approved by the Company and any broker designated by the Company to handle option exercises, designate a third party who, on your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

11. Right of First Refusal. Shares of Common Stock that you acquire upon exercise of your option are subject to any right of first refusal that may be described in the Company's bylaws in effect at such time the Company elects to exercise its right; *provided, however*, that if there is no right of first refusal described in the Company's bylaws at such time, the right of first refusal described below will apply. The Company's right of first refusal will expire on the first date upon which any security of the Company is listed (or approved for listing) upon notice of issuance on a national securities exchange or quotation system (the "**Listing Date**").

(a) Prior to the Listing Date, you may not validly Transfer (as defined below) any shares of Common Stock acquired upon exercise of your option, or any interest in such shares, unless such Transfer is made in compliance with the following provisions:

(i) Before there can be a valid Transfer of any shares of Common Stock or any interest therein, the record holder of the shares of Common Stock to be transferred (the "**Offered Shares**") will give written notice (by registered or certified mail) to the Company. Such notice will specify the identity of the proposed transferee, the cash price offered for the Offered Shares by the proposed transferee (or, if the proposed Transfer is one in which the holder will not receive cash, such as an involuntary transfer, gift, donation or pledge, the holder will state that no purchase price is being proposed), and the other terms and conditions of the proposed Transfer. The date such notice is mailed will be hereinafter referred to as the "**Notice Date**" and the record holder of the Offered Shares will be hereinafter referred to as the "**Offeror**." If, from time to time, there is any stock dividend, stock split or other change in the character or amount of any of the outstanding Common Stock which is subject to the provisions of your option, then in such event any and all new, substituted or additional securities to which you are entitled by reason of your ownership of the shares of Common Stock acquired upon exercise of your option will be immediately subject to the Company's Right of First Refusal (as defined below) with the same force and effect as the shares subject to the Right of First Refusal immediately before such event.

(ii) For a period of 30 calendar days after the Notice Date, or such longer period as may be required to avoid the classification of your option as a liability for financial accounting purposes, the Company will have the option to purchase all (but not less than all) of the Offered Shares at the purchase price and on the terms set forth in Section 11(a)(iii) (the Company's "**Right of First Refusal**"). In the event that the proposed Transfer is one involving no payment of a purchase price, the purchase price will be deemed to be the Fair Market Value of the Offered Shares as determined in good faith by the Board in its discretion. The Company may exercise its Right of First Refusal by mailing (by registered or certified mail) written notice of exercise of its Right of First Refusal to the Offeror prior to the end of said 30 days (including any extension required to avoid classification of the option as a liability for financial accounting purposes).

(iii) The price at which the Company may purchase the Offered Shares pursuant to the exercise of its Right of First Refusal will be the cash price offered for the Offered Shares by the proposed transferee (as set forth in the notice required under Section 11(a)(i)), or the Fair Market Value as determined by the Board in the event no purchase price is involved. To the extent consideration other than cash is offered by the proposed transferee, the Company will not be required to pay any additional amounts to the Offeror other than the cash price offered (or the Fair Market Value, if applicable). The Company's notice of exercise of its Right of First Refusal will be accompanied by full payment for the Offered Shares and, upon such payment by the Company, the Company will acquire full right, title and interest to all of the Offered Shares.

(iv) If, and only if, the option given pursuant to Section 11(a)(ii) is not exercised, the Transfer proposed in the notice given pursuant to Section 11(a)(i) may take place; *provided, however*, that such Transfer must, in all respects, be exactly as proposed in said notice except that such Transfer may not take place either before the 10th calendar day after the expiration of the 30 day option exercise period or after the ninetieth 90th calendar day after the expiration of the 30 day option exercise period, and if such Transfer has not taken place prior to said 90th day, such Transfer may not take place without once again complying with this Section 11(a). The option exercise periods in this Section 11(a)(iv) will be adjusted to include any extension required to avoid the classification of your option as a liability for financial accounting purposes.

(b) As used in this Section 11, the term "**Transfer**" means any sale, encumbrance, pledge, gift or other form of disposition or transfer of shares of Common Stock or any legal or equitable interest therein; *provided, however*, that the term Transfer does not include a transfer of such shares or interests by will or intestacy to your Immediate Family (as defined below). In such case, the transferee or other recipient will receive and hold the shares of Common Stock so transferred subject to the provisions of this Section, and there will be no further transfer of such shares except in accordance with the terms of this Section 11. As used herein, the term "**Immediate Family**" will mean your spouse, the lineal descendant or antecedent, father, mother, brother or sister, child, adopted child, grandchild or adopted grandchild of you or your spouse, or the spouse of any child, adopted child, grandchild or adopted grandchild of you or your spouse.

(c) None of the shares of Common Stock purchased on exercise of your option will be transferred on the Company's books nor will the Company recognize any such Transfer of any such shares or any interest therein unless and until all applicable provisions of this Section 11 have been complied with in all respects. The certificates of stock evidencing shares of Common Stock purchased on exercise of your option will bear an appropriate legend referring to the transfer restrictions imposed by this Section 11.

(d) To ensure that the shares subject to the Company's Right of First Refusal will be available for repurchase by the Company, the Company may require you to deposit the certificates evidencing the shares that you purchase upon exercise of your option with an escrow agent designated by the Company under the terms and conditions of an escrow agreement approved by the Company. If the Company does not require such deposit as a condition of exercise of your option, the Company reserves the right at any time to require you to so deposit the certificates in escrow. As soon as practicable after the expiration of the Company's Right of First Refusal, the agent will deliver to you the shares and any other property no longer subject to such restriction. In the event the shares and any other property held in escrow are subject to the Company's exercise of its Right of First Refusal, the notices required to be given to you will be given to the escrow agent, and any payment required to be given to you will be given to the escrow agent. Within 30 days after payment by the Company for the Offered Shares, the escrow agent will deliver the Offered Shares that the Company has repurchased to the Company and will deliver the payment received from the Company to you.

12. Option not a Service Contract. Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective stockholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

13. Withholding Obligations.

(a) At the time you exercise your option, in whole or in part, and at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a “same day sale” pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

(b) If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence will not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock will be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure will be your sole responsibility.

(c) You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

14. Tax Consequences. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the “fair market value” per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option. Because the

Common Stock is not traded on an established securities market, the Fair Market Value is determined by the Board, perhaps in consultation with an independent valuation firm retained by the Company. You acknowledge that there is no guarantee that the Internal Revenue Service will agree with the valuation as determined by the Board, and you will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that the valuation determined by the Board is less than the “fair market value” as subsequently determined by the Internal Revenue Service.

15. Notices. Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

16. Governing Plan Document. Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control.

ATTACHMENT II

2020 EQUITY INCENTIVE PLAN

ATTACHMENT III
NOTICE OF EXERCISE

ARTIVA BIOTHERAPEUTICS, INC.
NOTICE OF EXERCISE

This constitutes notice to **Artiva Biotherapeutics, Inc.** (the “**Company**”) under my stock option that I elect to purchase the below number of shares of Common Stock of the Company (the “**Shares**”) for the price set forth below. Use of certain payment methods is subject to Company and/or Board consent and certain additional requirements set forth in the Option Agreement and the Plan. If the Company uses an electronic capitalization table system (such as Carta or Shareworks) and the fields below are blank, the blank fields shall be deemed to come from the electronic capitalization system and is considered part of this Notice of Exercise.

Option Information

Type of option (check one):

Incentive ☐ Nonstatutory ☐

Stock option dated:

Number of Shares as to which option is exercised:

Certificates to be issued in name of:³

Exercise Information

Date of Exercise:

Total exercise price:

Cash:⁴

Regulation T Program (cashless exercise):⁵

Value of _____ Shares delivered with this notice:⁶

Value of _____ Shares pursuant to net exercise:⁷

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the 2020 Equity Incentive Plan, (ii) to provide for the payment by me to you (in the manner designated by you) of your withholding obligation, if any, relating to the exercise of this option, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within 15 days after the date of any disposition of any of the Shares issued upon exercise of this option that occurs within two years after the date of grant of this option or within one year after such Shares are issued upon exercise of this option. I further agree that this Notice of Exercise may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

I hereby make the following certifications and representations with respect to the number of Shares listed above, which are being acquired by me for my own account upon exercise of the option as set forth above:

I acknowledge that the Shares have not been registered under the Securities Act of 1933, as amended (the “**Securities Act**”), and are deemed to constitute “restricted securities” under Rule 701 and Rule 144 promulgated under the Securities Act. I warrant and represent to the Company that I have no present intention of distributing or selling said Shares, except as permitted under the Securities Act and any applicable state securities laws.

³ If left blank, will be issued in the name of the option holder.

⁴ Cash may be in the form of cash, check, bank draft, electronic funds transfer or money order payment.

⁵ Subject to Company and/or Board consent and must meet the public trading and other requirements set forth in the Option Agreement.

⁶ Subject to Company and/or Board consent and must meet the public trading and other requirements set forth in the Option Agreement. Shares must be valued in accordance with the terms of the option being exercised, and must be owned free and clear of any liens, claims, encumbrances or security interests. Certificates must be endorsed or accompanied by an executed assignment separate from certificate.

⁷ Subject to Company and/or Board consent and must be a Nonstatutory Option.

I further acknowledge and agree that, except for such information as required to be delivered to me by the Company pursuant to the option or the Plan (if any), I will have no right to receive any information from the Company by virtue of the grant of the option or the purchase of shares of Common Stock through exercise of the option, ownership of such shares of Common Stock, or as a result of my being a holder of record of stock of the Company. Without limiting the foregoing, to the fullest extent permitted by law, I hereby waive all inspection rights under Section 220 of the Delaware General Corporation Law and all such similar information and/or inspection rights that may be provided under the law of any jurisdiction, or any federal, state or foreign regulation, that are, or may become, applicable to the Company or the Company's capital stock (the "**Inspection Rights**"). I hereby covenant and agree never to directly or indirectly commence, voluntarily aid in any way, prosecute, assign, transfer, or cause to be commenced any claim, action, cause of action, or other proceeding to pursue or exercise the Inspection Rights.

I further acknowledge that I will not be able to resell the Shares for at least 90 days after the stock of the Company becomes publicly traded (*i.e.*, subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934) under Rule 701 and that more restrictive conditions apply to affiliates of the Company under Rule 144.

I further acknowledge that all certificates representing any of the Shares subject to the provisions of the option will have endorsed thereon appropriate legends reflecting the foregoing limitations, as well as any legends reflecting restrictions pursuant to the Company's Certificate of Incorporation, Bylaws and/or applicable securities laws.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act (or such longer period as the underwriters or the Company will request to facilitate compliance with applicable FINRA rules) (the "**Lock-Up Period**"). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

(Signature)

Name (Please Print)

Address of Record: _____

Email: _____

ARTIVA BIOTHERAPEUTICS, INC.

STOCK OPTION GRANT NOTICE
WITH ACCELERATION OF VESTING
(2020 EQUITY INCENTIVE PLAN)

Artiva Biotherapeutics, Inc. (the “*Company*”), pursuant to its 2020 Equity Incentive Plan (as may be amended and/or restated from time to time, the “*Plan*”), has granted to Optionholder an option to purchase the number of shares of the Common Stock set forth below (the “*Option*”). The Option is subject to all of the terms and conditions as set forth in this Stock Option Grant Notice (the “*Grant Notice*”) and in the Plan, the Option Agreement, and the Notice of Exercise, all of which are attached to this Grant Notice and incorporated into this Grant Notice in their entirety. Capitalized terms not explicitly defined in this Grant Notice but defined in the Plan or the Option Agreement shall have the meanings set forth in the Plan or the Option Agreement, as applicable. If the Company uses an electronic capitalization table system (such as Carta or Shareworks) and the fields below are blank or the information is otherwise provided in a different format electronically, the blank fields and other information (such as exercise schedule and type of grant) shall be deemed to come from the electronic capitalization system and is considered part of this Grant Notice.

Optionholder:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares Subject to Option:	_____
Exercise Price (Per Share) ⁸ :	_____
Total Exercise Price:	_____
Expiration Date:	_____
Exercise Schedule:	[Same as Vesting Schedule] [Early Exercise Permitted]
Type of Grant ⁹ :	[Incentive Stock Option] [Nonstatutory Stock Option]
Grant Number:	_____

Vesting Schedule: [Sample vesting schedule: 1/4th of the shares initially subject to the Option will vest on the first anniversary of the Vesting Commencement Date, and the balance of the shares subject to the Option shall vest at a rate of 1/36th per month over the following 36 months; in each case, subject to acceleration of vesting as provided in the Option Agreement and Optionholder continuing to provide Continuous Service as of each such date.]

⁸ The exercise price may be paid by one or a combination of the methods permitted in the Option Agreement.

⁹ If this is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options) cannot be first *exercisable* for more than \$100,000 in value (measured by exercise price) in any calendar year. Any excess over \$100,000 is a Nonstatutory Stock Option.

Optionholder Acknowledgements: By Optionholder's signature below or by electronic acceptance or authentication in a form authorized by the Company, Optionholder understands and agrees that the Option is governed by this Stock Option Grant Notice, and the provisions of the Plan and the Option Agreement and the Notice of Exercise, all of which are made a part of this document.

By accepting this Option, Optionholder consents to receive this Grant Notice, the Option Agreement, the Plan, and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Optionholder represents that he or she has read and is familiar with the provisions of the Plan and the Option Agreement. Optionholder acknowledges and agrees that this Grant Notice and the Option Agreement may not be modified, amended or revised except in writing signed by Optionholder and a duly authorized officer of the Company.

Optionholder further acknowledges that in the event of any conflict between the provisions in this Grant Notice, the Option Agreement, the Notice of Exercise and the terms of the Plan, the terms of the Plan shall control. Optionholder further acknowledges that the Option Agreement sets forth the entire understanding between Optionholder and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of other equity awards previously granted to Optionholder and any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and Optionholder in each case that specifies the terms that should govern this Option.

Optionholder further acknowledges that this Grant Notice has been prepared on behalf of the Company by Cooley LLP, counsel to the Company and that Cooley LLP does not represent, and is not acting on behalf of, Optionholder in any capacity. Optionholder has been provided with an opportunity to consult with Optionholder's own counsel with respect to this Grant Notice.

This Grant Notice may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

Artiva Biotherapeutics, Inc.

By: _____
(Signature)

Name: _____
Title: _____
Date: _____

Optionholder:

By: _____
(Signature)

Name: _____
Email: _____
Date: _____

Attachments: Option Agreement, 2020 Equity Incentive Plan and Notice of Exercise

ATTACHMENT I
OPTION AGREEMENT

ARTIVA BIOTHERAPEUTICS, INC.

2020 Equity Incentive Plan

OPTION AGREEMENT
(INCENTIVE STOCK OPTION OR NONSTATUTORY STOCK OPTION)

Pursuant to your Stock Option Grant Notice (“**Grant Notice**”) and this Option Agreement, **Artiva Biotherapeutics, Inc.** (the “**Company**”) has granted you an option under its 2020 Equity Incentive Plan (the “**Plan**”) to purchase the number of shares of the Company’s Common Stock indicated in your Grant Notice at the exercise price indicated in your Grant Notice. The option is granted to you effective as of the date of grant set forth in the Grant Notice (the “**Date of Grant**”). If there is any conflict between the terms in this Option Agreement and the Plan, the terms of the Plan will control. Capitalized terms not explicitly defined in this Option Agreement or in the Grant Notice but defined in the Plan will have the same definitions as in the Plan.

The details of your option, in addition to those set forth in the Grant Notice and the Plan, are as follows:

17. Vesting.

(a) Your option will vest as provided in your Grant Notice. Vesting will cease upon the termination of your Continuous Service. If a Change in Control occurs and upon or within three months prior to, or 12 months after, the effective time of such Change in Control your Continuous Service terminates due to an involuntary termination (not including death or Disability) without Cause or your voluntary termination with Good Reason, then, as of the date of termination of your Continuous Service or the effective time of such Change in Control (whichever occurs later), the vesting and exercisability of your option shall be accelerated in full, such that 100% of the total number of shares subject to your option shall become immediately vested and exercisable.

(b) If any payment or benefit you would receive from the Company or otherwise in connection with a Change in Control or other similar transaction (“**Payment**”) would (1) constitute a “parachute payment” within the meaning of Section 280G of the Code, and (2) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “**Excise Tax**”), then such Payment will be equal to the Reduced Amount. The “**Reduced Amount**” will be either (x) the largest portion of the Payment that would result in no portion of the Payment being subject to the Excise Tax, or (y) the largest portion, up to and including the total, of the Payment, whichever amount ((x) or (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater amount of the Payment notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in payments or benefits constituting “parachute payments” is necessary so that the Payment equals the Reduced Amount, reduction will occur in the manner (the “**Reduction Method**”) that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the “**Pro Rata Reduction Method**”).

Notwithstanding the foregoing, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A of the Code (“**Section 409A**”) that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (A) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (B) as a

second priority, Payments that are contingent on future events (e.g., being terminated without cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (C) as a third priority, Payments that are “deferred compensation” within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

The independent registered public accounting firm engaged by the Company for general audit purposes as of the day prior to the effective date of the event described in Section 280G(b)(2)(A)(i) of the Code will perform the foregoing calculations. If the independent registered public accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the change in control or similar transaction, the Company will appoint a nationally recognized independent registered public accounting firm to make the determinations required hereunder. The Company will bear all expenses with respect to the determinations by such independent registered public accounting firm required to be made hereunder. The independent registered public accounting firm engaged to make the determinations hereunder will make its determination with input from you (or your counsel) and provide its calculations, together with detailed supporting documentation, to the Company and you within 15 calendar days after the date on which your right to a Payment is triggered (if requested at that time by the Company or you) or such other time as reasonably requested by the Company or you.

If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of the first paragraph of this Section 1(b) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you shall promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of the first paragraph of this Section 1(b) so that no portion of the remaining Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) in the first paragraph of this Section 1(b), you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

18. Number of Shares and Exercise Price. The number of shares of Common Stock subject to your option and your exercise price per share in your Grant Notice will be adjusted for Capitalization Adjustments.

19. Exercise Restriction for Non-Exempt Employees. If you are an Employee eligible for overtime compensation under the Fair Labor Standards Act of 1938, as amended (that is, a “*Non-Exempt Employee*”), and except as otherwise provided in the Plan, you may not exercise your option until you have completed at least six months of Continuous Service measured from the Date of Grant, even if you have already been an employee for more than six months. Consistent with the provisions of the Worker Economic Opportunity Act, you may exercise your option as to any vested portion prior to such six month anniversary in the case of (i) your death or disability, (ii) a Corporate Transaction in which your option is not assumed, continued or substituted, (iii) a Change in Control or (iv) your termination of Continuous Service on your “retirement” (as defined in the Company’s benefit plans).

20. Exercise Prior to Vesting (“*Early Exercise*”). If permitted in your Grant Notice (*i.e.*, the “Exercise Schedule” indicates “Early Exercise Permitted”) and subject to the provisions of your option, you may elect at any time that is both (i) during the period of your Continuous Service and (ii) during the term of your option, to exercise all or part of your option, including the unvested portion of your option; *provided, however*, that:

(a) a partial exercise of your option will be deemed to cover first vested shares of Common Stock and then the earliest vesting installment of unvested shares of Common Stock;

(b) any shares of Common Stock so purchased from installments that have not vested as of the date of exercise will be subject to the purchase option in favor of the Company as described in the Company's form of Early Exercise Stock Purchase Agreement;

(c) you will enter into the Company's form of Early Exercise Stock Purchase Agreement with a vesting schedule that will result in the same vesting as if no early exercise had occurred; and

(d) if your option is an Incentive Stock Option, then, to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the shares of Common Stock with respect to which your option plus all other Incentive Stock Options you hold are exercisable for the first time by you during any calendar year (under all plans of the Company and its Affiliates) exceeds \$100,000, your option(s) or portions thereof that exceed such limit (according to the order in which they were granted) will be treated as Nonstatutory Stock Options.

21. Method of Payment. You must pay the full amount of the exercise price for the shares you wish to exercise. You may pay the exercise price as follows:

(a) By cash, check, bank draft, electronic funds transfer or money order payable to the Company;

(b) subject to Company and/or Board consent at the time of exercise and provided that at the time of exercise the Common Stock is publicly traded, pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board that, prior to the issuance of Common Stock, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the aggregate exercise price to the Company from the sales proceeds. This manner of payment is also known as a "broker-assisted exercise", "same day sale", or "sell to cover";

(c) subject to Company and/or Board consent at the time of exercise and provided that at the time of exercise the Common Stock is publicly traded, by delivery to the Company (either by actual delivery or attestation) of already-owned shares of Common Stock that are owned free and clear of any liens, claims, encumbrances or security interests, and that are valued at Fair Market Value on the date of exercise. "Delivery" for these purposes, in the sole discretion of the Company at the time you exercise your option, will include delivery to the Company of your attestation of ownership of such shares of Common Stock in a form approved by the Company. You may not exercise your option by delivery to the Company of Common Stock if doing so would violate the provisions of any law, regulation or agreement restricting the redemption of the Company's stock;

(d) subject to Company and/or Board consent at the time of exercise, and provided that the Option is a Nonstatutory Stock Option, by a "net exercise" arrangement pursuant to which the Company will reduce the number of shares of Common Stock issued upon exercise of the Option by the largest whole number of shares with a Fair Market Value that does not exceed the aggregate exercise price plus, to the extent permitted by the Company and/or Board at the time of exercise, the aggregate withholding obligations in respect of the Option exercise; provided, further that you must pay any remaining balance of the aggregate exercise price not satisfied by the "net exercise" in cash or other permitted form of payment. Shares of Common Stock will no longer be subject to the Option and will not be exercisable thereafter to the extent that (A) shares issuable upon exercise are used to pay the exercise price pursuant to the "net exercise," (B) shares are delivered to you as a result of such exercise, and (C) shares are withheld to satisfy tax withholding obligations;

(e) subject to the consent of the Company and/or Board at the time of exercise, according to a deferred payment or similar arrangement with you; *provided, however*, that interest will compound at least annually and will be charged at the minimum rate of interest necessary to avoid (A) the imputation of interest income to the Company and compensation income to the Optionholder under any applicable provisions of the Code, and (B) the classification of the Option as a liability for financial accounting purposes; or

(f) in any other form of legal consideration that may be acceptable to the Board.

22. Whole Shares. You may exercise your option only for whole shares of Common Stock.

23. Securities Law Compliance. In no event may you exercise your option unless the shares of Common Stock issuable upon exercise are then registered under the Securities Act or, if not registered, the Company has determined that your exercise and the issuance of the shares would be exempt from the registration requirements of the Securities Act. The exercise of your option also must comply with all other applicable laws and regulations governing your option, and you may not exercise your option if the Company determines that such exercise would not be in material compliance with such laws and regulations (including any restrictions on exercise required for compliance with Treas. Reg. 1.401(k)-1(d)(3), if applicable).

24. Term. You may not exercise your option before the Date of Grant or after the expiration of the option's term. Except as set forth in your Grant Notice, the term of your option expires, subject to the provisions of Section 5(h) of the Plan, upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, your Disability or your death (except as otherwise provided in Section 8(d) below); *provided, however*, that if during any part of such three month period your option is not exercisable solely because of the condition set forth in the section above relating to "Securities Law Compliance," your option will not expire until the earlier of the Expiration Date or until it has been exercisable for an aggregate period of three months after the termination of your Continuous Service; *provided further*, that if (i) you are a Non-Exempt Employee, (ii) your Continuous Service terminates within six months after the Date of Grant, and (iii) you have vested in a portion of your option at the time of your termination of Continuous Service, your option will not expire until the earlier of (x) the later of (A) the date that is seven months after the Date of Grant, and (B) the date that is three months after the termination of your Continuous Service, and (y) the Expiration Date;

(c) 12 months after the termination of your Continuous Service due to your Disability (except as otherwise provided in Section 8(d)) below;

(d) 18 months after your death if you die either during your Continuous Service or within three (3) months after your Continuous Service terminates for any reason other than Cause;

(e) the Expiration Date indicated in your Grant Notice; or

(f) the day before the 10th anniversary of the Date of Grant.

If your option is an Incentive Stock Option, note that to obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the Date of Grant and ending on the day three months before the date of your option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. The Company has provided for extended exercisability of your option under certain circumstances for your benefit but cannot guarantee that your option will necessarily be treated as an Incentive Stock Option if you continue to provide services to the Company or an Affiliate as a Consultant or Director after your employment terminates or if you otherwise exercise your option more than three months after the date your employment with the Company or an Affiliate terminates.

25. Exercise.

(a) You may exercise the vested portion of your option (and the unvested portion of your option if your Grant Notice so permits) during its term by delivering a Notice of Exercise (in a form designated by the Company) together with the exercise price to the Secretary of the Company, or to such other person as the Company may designate, during regular business hours. If required by the Company, your exercise may be made contingent on your execution of any additional documents specified by the Company (including, without limitation, any voting agreement or other agreement between the Company and some or all of its stockholders).

(b) By exercising your option you agree that, as a condition to any exercise of your option, the Company may require you to enter into an arrangement providing for the payment by you to the Company of any tax withholding obligation of the Company arising by reason of (i) the exercise of your option, (ii) the lapse of any substantial risk of forfeiture to which the shares of Common Stock are subject at the time of exercise, or (iii) the disposition of shares of Common Stock acquired upon such exercise.

(c) If your option is an Incentive Stock Option, by exercising your option you agree that you will notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your option that occurs within two years after the Date of Grant or within one year after such shares of Common Stock are transferred upon exercise of your option.

(d) By exercising your option you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of 180 days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with applicable FINRA rules (the "**Lock-Up Period**"); *provided, however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 9(d). The underwriters of the Company's stock are intended third party beneficiaries of this Section 9(d) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

26. Transferability. Except as otherwise provided in this Section 10, your option is not transferable, except by will or by the laws of descent and distribution, and is exercisable during your life only by you.

(a) **Certain Trusts.** Upon receiving written permission from the Board or its duly authorized designee, you may transfer your option to a trust if you are considered to be the sole beneficial owner (determined under Section 671 of the Code and applicable state law) while the option is held in the trust. You and the trustee must enter into transfer and other agreements required by the Company.

(b) Domestic Relations Orders. Upon receiving written permission from the Board or its duly authorized designee, and provided that you and the designated transferee enter into transfer and other agreements required by the Company, you may transfer your option pursuant to the terms of a domestic relations order, official marital settlement agreement or other divorce or separation instrument as permitted by Treasury Regulation 1.421-1(b)(2) that contains the information required by the Company to effectuate the transfer. You are encouraged to discuss the proposed terms of any division of this option with the Company prior to finalizing the domestic relations order or marital settlement agreement to help ensure the required information is contained within the domestic relations order or marital settlement agreement. If this option is an Incentive Stock Option, this option may be deemed to be a Nonstatutory Stock Option as a result of such transfer.

(c) Beneficiary Designation. Upon receiving written permission from the Board or its duly authorized designee, you may, by delivering written notice to the Company, in a form approved by the Company and any broker designated by the Company to handle option exercises, designate a third party who, on your death, will thereafter be entitled to exercise this option and receive the Common Stock or other consideration resulting from such exercise. In the absence of such a designation, your executor or administrator of your estate will be entitled to exercise this option and receive, on behalf of your estate, the Common Stock or other consideration resulting from such exercise.

27. Right of First Refusal. Shares of Common Stock that you acquire upon exercise of your option are subject to any right of first refusal that may be described in the Company's bylaws in effect at such time the Company elects to exercise its right; *provided, however*, that if there is no right of first refusal described in the Company's bylaws at such time, the right of first refusal described below will apply. The Company's right of first refusal will expire on the first date upon which any security of the Company is listed (or approved for listing) upon notice of issuance on a national securities exchange or quotation system (the "**Listing Date**").

(a) Prior to the Listing Date, you may not validly Transfer (as defined below) any shares of Common Stock acquired upon exercise of your option, or any interest in such shares, unless such Transfer is made in compliance with the following provisions:

(i) Before there can be a valid Transfer of any shares of Common Stock or any interest therein, the record holder of the shares of Common Stock to be transferred (the "**Offered Shares**") will give written notice (by registered or certified mail) to the Company. Such notice will specify the identity of the proposed transferee, the cash price offered for the Offered Shares by the proposed transferee (or, if the proposed Transfer is one in which the holder will not receive cash, such as an involuntary transfer, gift, donation or pledge, the holder will state that no purchase price is being proposed), and the other terms and conditions of the proposed Transfer. The date such notice is mailed will be hereinafter referred to as the "**Notice Date**" and the record holder of the Offered Shares will be hereinafter referred to as the "**Offeror**." If, from time to time, there is any stock dividend, stock split or other change in the character or amount of any of the outstanding Common Stock which is subject to the provisions of your option, then in such event any and all new, substituted or additional securities to which you are entitled by reason of your ownership of the shares of Common Stock acquired upon exercise of your option will be immediately subject to the Company's Right of First Refusal (as defined below) with the same force and effect as the shares subject to the Right of First Refusal immediately before such event.

(ii) For a period of 30 calendar days after the Notice Date, or such longer period as may be required to avoid the classification of your option as a liability for financial accounting purposes, the Company will have the option to purchase all (but not less than all) of the Offered Shares at the purchase price and on the terms set forth in Section 11(a)(iii) (the Company's "**Right of First Refusal**"). In the event that the proposed Transfer is one involving no payment of a purchase price, the purchase price will be deemed to be the Fair Market Value of the Offered Shares as determined in good faith by the Board in its discretion. The Company may exercise its Right of First Refusal by mailing (by registered or certified mail) written notice of exercise of its Right of First Refusal to the Offeror prior to the end of said 30 days (including any extension required to avoid classification of the option as a liability for financial accounting purposes).

(iii) The price at which the Company may purchase the Offered Shares pursuant to the exercise of its Right of First Refusal will be the cash price offered for the Offered Shares by the proposed transferee (as set forth in the notice required under Section 11(a)(i)), or the Fair Market Value as determined by the Board in the event no purchase price is involved. To the extent consideration other than cash is offered by the proposed transferee, the Company will not be required to pay any additional amounts to the Offeror other than the cash price offered (or the Fair Market Value, if applicable). The Company's notice of exercise of its Right of First Refusal will be accompanied by full payment for the Offered Shares and, upon such payment by the Company, the Company will acquire full right, title and interest to all of the Offered Shares.

(iv) If, and only if, the option given pursuant to Section 11(a)(ii) is not exercised, the Transfer proposed in the notice given pursuant to Section 11(a)(i) may take place; *provided, however*, that such Transfer must, in all respects, be exactly as proposed in said notice except that such Transfer may not take place either before the 10th calendar day after the expiration of the 30 day option exercise period or after the ninetieth 90th calendar day after the expiration of the 30 day option exercise period, and if such Transfer has not taken place prior to said 90th day, such Transfer may not take place without once again complying with this Section 11(a). The option exercise periods in this Section 11(a)(iv) will be adjusted to include any extension required to avoid the classification of your option as a liability for financial accounting purposes.

(b) As used in this Section 11, the term "**Transfer**" means any sale, encumbrance, pledge, gift or other form of disposition or transfer of shares of Common Stock or any legal or equitable interest therein; *provided, however*, that the term Transfer does not include a transfer of such shares or interests by will or intestacy to your Immediate Family (as defined below). In such case, the transferee or other recipient will receive and hold the shares of Common Stock so transferred subject to the provisions of this Section, and there will be no further transfer of such shares except in accordance with the terms of this Section 11. As used herein, the term "**Immediate Family**" will mean your spouse, the lineal descendant or antecedent, father, mother, brother or sister, child, adopted child, grandchild or adopted grandchild of you or your spouse, or the spouse of any child, adopted child, grandchild or adopted grandchild of you or your spouse.

(c) None of the shares of Common Stock purchased on exercise of your option will be transferred on the Company's books nor will the Company recognize any such Transfer of any such shares or any interest therein unless and until all applicable provisions of this Section 11 have been complied with in all respects. The certificates of stock evidencing shares of Common Stock purchased on exercise of your option will bear an appropriate legend referring to the transfer restrictions imposed by this Section 11.

(d) To ensure that the shares subject to the Company's Right of First Refusal will be available for repurchase by the Company, the Company may require you to deposit the certificates evidencing the shares that you purchase upon exercise of your option with an escrow agent designated by the Company under the terms and conditions of an escrow agreement approved by the Company. If the Company does not require such deposit as a condition of exercise of your option, the Company reserves the

right at any time to require you to so deposit the certificates in escrow. As soon as practicable after the expiration of the Company's Right of First Refusal, the agent will deliver to you the shares and any other property no longer subject to such restriction. In the event the shares and any other property held in escrow are subject to the Company's exercise of its Right of First Refusal, the notices required to be given to you will be given to the escrow agent, and any payment required to be given to you will be given to the escrow agent. Within 30 days after payment by the Company for the Offered Shares, the escrow agent will deliver the Offered Shares that the Company has repurchased to the Company and will deliver the payment received from the Company to you.

28. Option not a Service Contract. Your option is not an employment or service contract, and nothing in your option will be deemed to create in any way whatsoever any obligation on your part to continue in the employ of the Company or an Affiliate, or of the Company or an Affiliate to continue your employment. In addition, nothing in your option will obligate the Company or an Affiliate, their respective stockholders, boards of directors, officers or employees to continue any relationship that you might have as a Director or Consultant for the Company or an Affiliate.

29. Withholding Obligations.

(a) At the time you exercise your option, in whole or in part, and at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "same day sale" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations of the Company or an Affiliate, if any, which arise in connection with the exercise of your option.

(b) If this option is a Nonstatutory Stock Option, then upon your request and subject to approval by the Company, and compliance with any applicable legal conditions or restrictions, the Company may withhold from fully vested shares of Common Stock otherwise issuable to you upon the exercise of your option a number of whole shares of Common Stock having a Fair Market Value, determined by the Company as of the date of exercise, not in excess of the minimum amount of tax required to be withheld by law (or such lower amount as may be necessary to avoid classification of your option as a liability for financial accounting purposes). If the date of determination of any tax withholding obligation is deferred to a date later than the date of exercise of your option, share withholding pursuant to the preceding sentence will not be permitted unless you make a proper and timely election under Section 83(b) of the Code, covering the aggregate number of shares of Common Stock acquired upon such exercise with respect to which such determination is otherwise deferred, to accelerate the determination of such tax withholding obligation to the date of exercise of your option. Notwithstanding the filing of such election, shares of Common Stock will be withheld solely from fully vested shares of Common Stock determined as of the date of exercise of your option that are otherwise issuable to you upon such exercise. Any adverse consequences to you arising in connection with such share withholding procedure will be your sole responsibility.

(c) You may not exercise your option unless the tax withholding obligations of the Company and/or any Affiliate are satisfied. Accordingly, you may not be able to exercise your option when desired even though your option is vested, and the Company will have no obligation to issue a certificate for such shares of Common Stock or release such shares of Common Stock from any escrow provided for herein, if applicable, unless such obligations are satisfied.

30. Tax Consequences. You hereby agree that the Company does not have a duty to design or administer the Plan or its other compensation programs in a manner that minimizes your tax liabilities. You will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from your option or your other compensation. In particular, you acknowledge that this option is exempt from Section 409A of the Code only if the exercise price per share specified in the Grant Notice is at least equal to the “fair market value” per share of the Common Stock on the Date of Grant and there is no other impermissible deferral of compensation associated with the option. Because the Common Stock is not traded on an established securities market, the Fair Market Value is determined by the Board, perhaps in consultation with an independent valuation firm retained by the Company. You acknowledge that there is no guarantee that the Internal Revenue Service will agree with the valuation as determined by the Board, and you will not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that the valuation determined by the Board is less than the “fair market value” as subsequently determined by the Internal Revenue Service.

31. Notices. Any notices provided for in your option or the Plan will be given in writing (including electronically) and will be deemed effectively given upon receipt or, in the case of notices delivered by mail by the Company to you, five days after deposit in the United States mail, postage prepaid, addressed to you at the last address you provided to the Company. The Company may, in its sole discretion, decide to deliver any documents related to participation in the Plan and this option by electronic means or to request your consent to participate in the Plan by electronic means. By accepting this option, you consent to receive such documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.

32. Governing Plan Document. Your option is subject to all the provisions of the Plan, the provisions of which are hereby made a part of your option, and is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. If there is any conflict between the provisions of your option and those of the Plan, the provisions of the Plan will control.

ATTACHMENT II

2020 EQUITY INCENTIVE PLAN

ARTIVA BIOTHERAPEUTICS, INC. 2024 EQUITY INCENTIVE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: [____], 2024
APPROVED BY THE STOCKHOLDERS: [____], 2024

1. GENERAL.

(a) Successor to and Continuation of Prior Plan. The Plan is the successor to and continuation of the Prior Plan. As of the Effective Date, (i) no additional awards may be granted under the Prior Plan; (ii) any Returning Shares will become available for issuance pursuant to Awards granted under this Plan; and (iii) all outstanding awards granted under the Prior Plan will remain subject to the terms of the Prior Plan (except to the extent such outstanding awards result in Returning Shares that become available for issuance pursuant to Awards granted under this Plan). All Awards granted under this Plan will be subject to the terms of this Plan.

(b) Plan Purpose. The Company, by means of the Plan, seeks to secure and retain the services of Employees, Directors and Consultants, to provide incentives for such persons to exert maximum efforts for the success of the Company and any Affiliate and to provide a means by which such persons may be given an opportunity to benefit from increases in value of the Common Stock through the granting of Awards.

(c) Available Awards. The Plan provides for the grant of the following Awards: (i) Incentive Stock Options; (ii) Nonstatutory Stock Options; (iii) SARs; (iv) Restricted Stock Awards; (v) RSU Awards; (vi) Performance Awards; and (vii) Other Awards.

(d) Adoption Date; Effective Date. The Plan will come into existence on the Adoption Date, but no Award may be granted prior to the Effective Date.

2. SHARES SUBJECT TO THE PLAN.

(a) Share Reserve. Subject to adjustment in accordance with Section 3(c) and any adjustments as necessary to implement any Capitalization Adjustments, the aggregate number of shares of Common Stock that may be issued pursuant to Awards will not exceed [____] shares (the “**Share Reserve**”), which is the sum of: (i) [____] new shares; plus (ii) [up to][500,000] shares available for issuance under the Prior Plan as of the Effective Date; plus (iii) up to [____] Returning Shares, as such shares become available from time to time. In addition, subject to any adjustments as necessary to implement any Capitalization Adjustments, such aggregate number of shares of Common Stock will automatically increase on January 1 of each year for a period of ten years commencing on January 1, 2025 and ending on (and including) January 1, 2034, in an amount equal to 5% of the total number of shares of Capital Stock outstanding on December 31 of the preceding year; provided, however, that the Board may act prior to January 1st of a given year to provide that the increase for such year will be a lesser number of shares of Common Stock.

(b) Aggregate Incentive Stock Option Limit. Notwithstanding anything to the contrary in Section 2(a) and subject to any adjustments as necessary to implement any Capitalization Adjustments, the aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is three times the Share Reserve.

(c) Share Reserve Operation.

(i) Limit Applies to Common Stock Issued Pursuant to Awards. For clarity, the Share Reserve is a limit on the number of shares of Common Stock that may be issued pursuant to Awards and does not limit the granting of Awards, except that the Company will keep available at all times the number of shares of Common Stock reasonably required to satisfy its obligations to issue shares pursuant to such Awards. Shares may be issued in connection with a merger or acquisition as permitted by, as applicable, Nasdaq Listing Rule 5635(c), NYSE Listed Company Manual Section 303A.08, NYSE American Company Guide Section 711 or other applicable rule, and such issuance will not reduce the number of shares available for issuance under the Plan.

(ii) Actions that Do Not Constitute Issuance of Common Stock and Do Not Reduce Share Reserve. The following actions do not result in an issuance of shares under the Plan and accordingly do not reduce the number of shares subject to the Share Reserve and available for issuance under the Plan: (1) the expiration or termination of any portion of an Award without the shares covered by such portion of the Award having been issued; (2) the settlement of any portion of an Award in cash (*i.e.*, the Participant receives cash rather than Common Stock); (3) the withholding of shares that would otherwise be issued by the Company to satisfy the exercise, strike or purchase price of an Award; or (4) the withholding of shares that would otherwise be issued by the Company to satisfy a tax withholding obligation in connection with an Award.

(iii) Reversion of Previously Issued Shares of Common Stock to Share Reserve. The following shares of Common Stock previously issued pursuant to an Award and accordingly initially deducted from the Share Reserve will be added back to the Share Reserve and again become available for issuance under the Plan: (1) any shares that are forfeited back to or repurchased by the Company because of a failure to meet a contingency or condition required for the vesting of such shares; (2) any shares that are reacquired by the Company to satisfy the exercise, strike or purchase price of an Award; and (3) any shares that are reacquired by the Company to satisfy a tax withholding obligation in connection with an Award.

3. ELIGIBILITY AND LIMITATIONS.

(a) Eligible Award Recipients. Subject to the terms of the Plan, Employees, Directors and Consultants are eligible to receive Awards.

(b) Specific Award Limitations.

(i) Limitations on Incentive Stock Option Recipients. Incentive Stock Options may be granted only to Employees of the Company or a “parent corporation” or “subsidiary corporation” thereof (as such terms are defined in Sections 424(e) and (f) of the Code).

(ii) Incentive Stock Option \$100,000 Limitation. To the extent that the aggregate Fair Market Value (determined at the time of grant) of Common Stock with respect to which Incentive Stock Options are exercisable for the first time by any Optionholder during any calendar year (under all plans of the Company and any Affiliates) exceeds \$100,000 (or such other limit established in the Code) or otherwise does not comply with the rules governing Incentive Stock Options, the Options or portions thereof that exceed such limit (according to the order in which they were granted) or otherwise do not comply with such rules will be treated as Nonstatutory Stock Options, notwithstanding any contrary provision of the applicable Option Agreement(s).

(iii) Limitations on Incentive Stock Options Granted to Ten Percent Stockholders. A Ten Percent Stockholder may not be granted an Incentive Stock Option unless (1) the exercise price of such Option is at least 110% of the Fair Market Value on the date of grant of such Option and (2) the Option is not exercisable after the expiration of five years from the date of grant of such Option.

(iv) Limitations on Nonstatutory Stock Options and SARs. Nonstatutory Stock Options and SARs may not be granted to Employees, Directors and Consultants unless the stock underlying such Awards is treated as “service recipient stock” under Section 409A or unless such Awards otherwise comply with the requirements of Section 409A.

(c) Aggregate Incentive Stock Option Limit. The aggregate maximum number of shares of Common Stock that may be issued pursuant to the exercise of Incentive Stock Options is the number of shares specified in Section 2(b).

(d) Non-Employee Director Compensation Limit. The aggregate value of all compensation granted or paid, as applicable, to any individual for service as a Non-Employee Director with respect to any fiscal year, including Awards granted and cash fees paid by the Company to such Non-Employee Director, will not exceed (1) \$750,000 in total value or (2) in the event such Non-Employee Director is first appointed or elected to the Board during such fiscal year, \$1,000,000 in total value, in each case, calculating the value of any equity awards based on the grant date fair value of such equity awards for financial reporting purposes. The limitations in this Section 4(d) shall apply commencing with the first fiscal year that begins following the Effective Date. Compensation will count towards this limit for the fiscal year in which it was granted or earned, and not later when distributed, in the event it is deferred.

4. OPTIONS AND STOCK APPRECIATION RIGHTS.

Each Option and SAR will have such terms and conditions as determined by the Board. Each Option will be designated in writing as an Incentive Stock Option or Nonstatutory Stock Option at the time of grant; provided, however, that if an Option is not so designated, then such Option will be a Nonstatutory Stock Option, and the shares purchased upon exercise of each type of Option will be separately accounted for. Each SAR will be denominated in shares of Common Stock equivalents. The terms and conditions of separate Options and SARs need not be identical; provided, however, that each Option Agreement and SAR Agreement will conform (through incorporation of provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(a) Term. Subject to Section 3(b) regarding Ten Percent Stockholders, no Option or SAR will be exercisable after the expiration of ten years from the date of grant of such Award or such shorter period specified in the Award Agreement.

(b) Exercise or Strike Price. Subject to Section 3(b) regarding Ten Percent Stockholders, the exercise or strike price of each Option or SAR will not be less than 100% of the Fair Market Value on the date of grant of such Award. Notwithstanding the foregoing, an Option or SAR may be granted with an exercise or strike price lower than 100% of the Fair Market Value on the date of grant of such Award if such Award is granted pursuant to an assumption of or substitution for another option or stock appreciation right pursuant to a Corporate Transaction and in a manner consistent with the provisions of Sections 409A and, if applicable, 424(a) of the Code.

(c) Exercise Procedure and Payment of Exercise Price for Options. In order to exercise an Option, the Participant must provide notice of exercise to the Plan Administrator in accordance with the procedures specified in the Option Agreement or otherwise provided by the Company. The Board has the authority to grant Options that do not permit all of the following methods of payment (or otherwise restrict the ability to use certain methods) and to grant Options that require the consent of the Company to utilize a particular method of payment. The exercise price of an Option may be paid, to the extent permitted by Applicable Law and as determined by the Board, by one or more of the following methods of payment to the extent set forth in the Option Agreement:

(i) by cash or check, bank draft or money order payable to the Company;

(ii) pursuant to a “cashless exercise” program developed under Regulation T as promulgated by the U.S. Federal Reserve Board that, prior to the issuance of the Common Stock subject to the Option, results in either the receipt of cash (or check) by the Company or the receipt of irrevocable instructions to pay the exercise price to the Company from the sales proceeds;

(iii) by delivery to the Company (either by actual delivery or attestation) of shares of Common Stock that are already owned by the Participant free and clear of any liens, claims, encumbrances or security interests, with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) at the time of exercise the Common Stock is publicly traded, (2) any remaining balance of the exercise price not satisfied by such delivery is paid by the Participant in cash or other permitted form of payment, (3) such delivery would not violate any Applicable Law or agreement restricting the redemption of the Common Stock, (4) any certificated shares are endorsed or accompanied by an executed assignment separate from certificate, and (5) such shares have been held by the Participant for any minimum period necessary to avoid adverse accounting treatment as a result of such delivery;

(iv) if the Option is a Nonstatutory Stock Option, by a “net exercise” arrangement pursuant to which the Company will reduce the number of shares of Common Stock issuable upon exercise by the largest whole number of shares with a Fair Market Value on the date of exercise that does not exceed the exercise price, provided that (1) such shares used to pay the exercise price will not be exercisable thereafter and (2) any remaining balance of the exercise price not satisfied by such net exercise is paid by the Participant in cash or other permitted form of payment; or

(v) in any other form of consideration that may be acceptable to the Board and permissible under Applicable Law.

(d) Exercise Procedure and Payment of Appreciation Distribution for SARs. In order to exercise any SAR, the Participant must provide notice of exercise to the Plan Administrator in accordance with the SAR Agreement. The appreciation distribution payable to a Participant upon the exercise of a SAR will not be greater than an amount equal to the excess of (i) the aggregate Fair Market Value on the date of exercise of a number of shares of Common Stock equal to the number of Common Stock equivalents that are vested and being exercised under such SAR, over (ii) the strike price of such SAR. Such appreciation distribution may be paid to the Participant in the form of Common Stock or cash (or any combination of Common Stock and cash) or in any other form of payment, as determined by the Board and specified in the SAR Agreement.

(e) Transferability. Options and SARs may not be transferred to third party financial institutions for value. The Board may impose such additional limitations on the transferability of an Option or SAR as it determines. In the absence of any such determination by the Board, the following restrictions on the transferability of Options and SARs will apply, provided that except as explicitly provided herein, neither an Option nor a SAR may be transferred for consideration and *provided, further*, that if an Option is an Incentive Stock Option, such Option may be deemed to be a Nonstatutory Stock Option as a result of such transfer:

(i) Restrictions on Transfer. An Option or SAR will not be transferable, except by will or by the laws of descent and distribution, and will be exercisable during the lifetime of the Participant only by the Participant; provided, however, that the Board may permit transfer of an Option or SAR in a manner that is not prohibited by applicable tax and securities laws upon the Participant’s request, including to a trust if the Participant is considered to be the sole beneficial owner of such trust (as determined under Section 671 of the Code and applicable U.S. state law) while such Option or SAR is held in such trust, provided that the Participant and the trustee enter into a transfer and other agreements required by the Company.

(ii) Domestic Relations Orders. Notwithstanding the foregoing, subject to the execution of transfer documentation in a format acceptable to the Company and subject to the approval of the Board or a duly authorized Officer, an Option or SAR may be transferred pursuant to a domestic relations order.

(f) Vesting. The Board may impose such restrictions on or conditions to the vesting and/or exercisability of an Option or SAR as determined by the Board. Except as otherwise provided in the applicable Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Options and SARs will cease upon termination of the Participant’s Continuous Service.

(g) Termination of Continuous Service for Cause. Except as explicitly otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service is terminated for Cause, the Participant's Options and SARs will terminate and be forfeited immediately upon such termination of Continuous Service, and the Participant will be prohibited from exercising any portion (including any vested portion) of such Awards on and after the date of such termination of Continuous Service and the Participant will have no further right, title or interest in such forfeited Award, the shares of Common Stock subject to the forfeited Award, or any consideration in respect of the forfeited Award.

(h) Post-Termination Exercise Period Following Termination of Continuous Service for Reasons Other than Cause. Subject to Section 4(i), if a Participant's Continuous Service terminates for any reason other than for Cause, the Participant may exercise his or her Option or SAR to the extent vested, but only within the following period of time or, if applicable, such other period of time provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate; provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)):

(i) three months following the date of such termination if such termination is a termination without Cause (other than any termination due to the Participant's Disability or death);

(ii) 12 months following the date of such termination if such termination is due to the Participant's Disability;

(iii) 18 months following the date of such termination if such termination is due to the Participant's death; or

(iv) 18 months following the date of the Participant's death if such death occurs following the date of such termination but during the period such Award is otherwise exercisable (as provided in (i) or (ii) above).

Following the date of such termination, to the extent the Participant does not exercise such Award within the applicable Post-Termination Exercise Period (or, if earlier, prior to the expiration of the maximum term of such Award), such unexercised portion of the Award will terminate, and the Participant will have no further right, title or interest in the terminated Award, the shares of Common Stock subject to the terminated Award, or any consideration in respect of the terminated Award.

(i) Restrictions on Exercise; Extension of Exercisability. A Participant may not exercise an Option or SAR at any time that the issuance of shares of Common Stock upon such exercise would violate Applicable Law. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason other than for Cause and, at any time during the last thirty days of the applicable Post-Termination Exercise Period: (i) the exercise of the Participant's Option or SAR would be prohibited solely because the issuance of shares of Common Stock upon

such exercise would violate Applicable Law, or (ii) the immediate sale of any shares of Common Stock issued upon such exercise would violate the Company's Trading Policy, then the applicable Post-Termination Exercise Period will be extended to the last day of the calendar month that commences following the date the Award would otherwise expire, with an additional extension of the exercise period to the last day of the next calendar month to apply if any of the foregoing restrictions apply at any time during such extended exercise period, generally without limitation as to the maximum permitted number of extensions); provided, however, that in no event may such Award be exercised after the expiration of its maximum term (as set forth in Section 4(a)).

(j) Non-Exempt Employees. No Option or SAR, whether or not vested, granted to an Employee who is a non-exempt employee for purposes of the U.S. Fair Labor Standards Act of 1938, as amended, will be first exercisable for any shares of Common Stock until at least six months following the date of grant of such Award. Notwithstanding the foregoing, in accordance with the provisions of the U.S. Worker Economic Opportunity Act, any vested portion of such Award may be exercised earlier than six months following the date of grant of such Award in the event of (i) such Participant's death or Disability, (ii) a Corporate Transaction in which such Award is not assumed, continued or substituted, (iii) a Change in Control, or (iv) such Participant's retirement (as such term may be defined in the Award Agreement or another applicable agreement or, in the absence of any such definition, in accordance with the Company's then current employment policies and guidelines). This Section 4(j) is intended to operate so that any income derived by a non-exempt employee in connection with the exercise or vesting of an Option or SAR will be exempt from his or her regular rate of pay.

(k) Whole Shares. Options and SARs may be exercised only with respect to whole shares of Common Stock or their equivalents.

5. AWARDS OTHER THAN OPTIONS AND STOCK APPRECIATION RIGHTS.

(a) Restricted Stock Awards and RSU Awards. Each Restricted Stock Award and RSU Award will have such terms and conditions as determined by the Board; provided, however, that each Restricted Stock Award Agreement and RSU Award Agreement will conform (through incorporation of the provisions hereof by reference in the Award Agreement or otherwise) to the substance of each of the following provisions:

(i) Form of Award.

(1) Restricted Stock Awards: To the extent consistent with the Company's Bylaws, at the Board's election, shares of Common Stock subject to a Restricted Stock Award may be (A) held in book entry form subject to the Company's instructions until such shares become vested or any other restrictions lapse, or (B) evidenced by a certificate, which certificate will be held in such form and manner as determined by the Board. Unless otherwise determined by the Board, a Participant will have voting and other rights as a stockholder of the Company with respect to any shares subject to a Restricted Stock Award.

(2) RSU Awards: An RSU Award represents a Participant's right to be issued on a future date the number of shares of Common Stock that is equal to the number of restricted stock units subject to the RSU Award. As a holder of an RSU Award, a Participant is an unsecured creditor of the Company with respect to the Company's unfunded obligation, if any, to issue shares of Common Stock in settlement of such Award and nothing contained in the Plan or any RSU Award Agreement, and no action taken pursuant to its provisions, will create or be construed to create a trust of any kind or a fiduciary relationship between a Participant and the Company or an Affiliate or any other person. A Participant will not have voting or any other rights as a stockholder of the Company with respect to any RSU Award (unless and until shares are actually issued in settlement of a vested RSU Award).

(i) Consideration. The Board shall determine the consideration, if any, payable by a Participant for Restricted Stock Awards and RSU Awards. Such consideration may include, but is not limited to, cash or check, bank draft or money order payable to the Company, or services rendered to be rendered to the Company or an Affiliate.

(ii) Vesting. The Board may impose such restrictions on or conditions to the vesting of a Restricted Stock Award or RSU Award as determined by the Board. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, vesting of Restricted Stock Awards and RSU Awards will cease upon termination of the Participant's Continuous Service.

(iii) Termination of Continuous Service. Except as otherwise provided in the Award Agreement or other written agreement between a Participant and the Company or an Affiliate, if a Participant's Continuous Service terminates for any reason, (1) the Company may receive through a forfeiture condition or a repurchase right any or all of the shares of Common Stock held by the Participant under his or her Restricted Stock Award that have not vested as of the date of such termination as set forth in the Restricted Stock Award Agreement and the Participant will have no further right, title or interest in the Restricted Stock Award, the shares of Common Stock subject to the Restricted Stock Award, or any consideration in respect of the Restricted Stock Award and (2) any portion of his or her RSU Award that has not vested will be forfeited upon such termination and the Participant will have no further right, title or interest in the RSU Award, the shares of Common Stock issuable pursuant to the RSU Award, or any consideration in respect of the RSU Award.

(iv) Dividends and Dividend Equivalents. Dividends or dividend equivalents may be paid or credited, as applicable, with respect to any shares of Common Stock subject to a Restricted Stock Award or RSU Award, as determined by the Board and specified in the Award Agreement.

(v) Settlement of RSU Awards. An RSU Award may be settled by the issuance of shares of Common Stock or cash (or any combination thereof) or in any other form of payment, as determined by the Board and specified in the RSU Award Agreement. At the time of grant, the Board may determine to impose such restrictions or conditions that delay such delivery to a date following the vesting of the RSU Award.

(b) Performance Awards. With respect to any Performance Award, the length of any Performance Period, the Performance Goals to be achieved during the Performance Period, the other terms and conditions of such Award, and the measure of whether and to what degree such Performance Goals have been attained will be determined by the Board.

(c) Other Awards. Other forms of Awards valued in whole or in part by reference to, or otherwise based on, Common Stock, including the appreciation in value thereof, may be granted either alone or in addition to Awards provided for under Section 4 and the preceding provisions of this Section 5. Subject to the provisions of the Plan, the Board will have sole and complete discretion to determine the persons to whom and the time or times at which such Other Awards will be granted, the number of shares of Common Stock (or the cash equivalent thereof) to be granted pursuant to such Other Awards and all other terms and conditions of such Other Awards.

6. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; OTHER CORPORATE EVENTS.

(a) Capitalization Adjustments. In the event of a Capitalization Adjustment, the Board shall appropriately and proportionately adjust: (i) the class(es) and maximum number of shares of Common Stock subject to the Plan and the maximum number of shares by which the Share Reserve may annually increase pursuant to Section 2(a); (ii) the class(es) and maximum number of shares that may be issued pursuant to the exercise of Incentive Stock Options pursuant to Section 2(a); and (iii) the class(es) and number of securities and exercise price, strike price or purchase price of Common Stock subject to outstanding Awards. The Board shall make such adjustments, and its determination shall be final, binding and conclusive. Notwithstanding the foregoing, no fractional shares or rights for fractional shares of Common Stock shall be created in order to implement any Capitalization Adjustment. The Board shall determine an appropriate equivalent benefit, if any, for any fractional shares or rights to fractional shares that might be created by the adjustments referred to in the preceding provisions of this Section.

(b) Dissolution or Liquidation. Except as otherwise provided in the Award Agreement, in the event of a dissolution or liquidation of the Company, all outstanding Awards (other than Awards consisting of vested and outstanding shares of Common Stock not subject to a forfeiture condition or the Company's right of repurchase) will terminate immediately prior to the completion of such dissolution or liquidation, and the shares of Common Stock subject to the Company's repurchase rights or subject to a forfeiture condition may be repurchased or reacquired by the Company notwithstanding the fact that the holder of such Award is providing Continuous Service, provided, however, that the Board may determine to cause some or all Awards to become fully vested, exercisable and/or no longer subject to repurchase or forfeiture (to the extent such Awards have not previously expired or terminated) before the dissolution or liquidation is completed but contingent on its completion.

(c) Corporate Transaction. The following provisions will apply to Awards in the event of a Corporate Transaction, except as set forth in Section 11, and unless otherwise provided in the instrument evidencing the Award or any other written agreement between the Company or any Affiliate and the Participant or unless otherwise expressly provided by the Board at the time of grant of an Award.

(i) Awards May Be Assumed. In the event of a Corporate Transaction, any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue any or all Awards outstanding under the Plan or may substitute similar awards for Awards outstanding under the Plan (including but not limited to, awards to acquire the same consideration paid to the stockholders of the Company pursuant to the Corporate Transaction), and any reacquisition or repurchase rights held by the Company in respect of Common Stock issued pursuant to Awards may be assigned by the Company to the successor of the Company (or the successor's parent company, if any), in connection with such Corporate Transaction. A surviving corporation or acquiring corporation (or its parent) may choose to assume or continue only a portion of an Award or substitute a similar award for only a portion of an Award, or may choose to assume, continue or substitute the Awards held by some, but not all Participants. The terms of any assumption, continuation or substitution will be set by the Board.

(ii) Awards Held by Current Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by Participants whose Continuous Service has not terminated prior to the effective time of the Corporate Transaction (referred to as the "**Current Participants**"), the vesting of such Awards (and, with respect to Options and Stock Appreciation Rights, the time when such Awards may be exercised) will be accelerated in full to a date prior to the effective time of such Corporate Transaction (contingent upon the effectiveness of the Corporate Transaction) as the Board determines (or, if the Board does not determine such a date, to the date that is five days prior to the effective time of the Corporate Transaction), and such Awards will terminate if not exercised (if applicable) at or prior to the effective time of the Corporate Transaction, and any reacquisition or repurchase rights held by the Company with respect to such Awards will lapse (contingent upon the effectiveness of the Corporate Transaction). With respect to the vesting of Performance Awards that will accelerate upon the occurrence of a Corporate Transaction pursuant to this subsection (ii) and that have multiple vesting levels depending on the level of performance, unless otherwise provided in the Award Agreement, the vesting of such Performance Awards will accelerate at 100% of the target level upon the occurrence of the Corporate Transaction in which the Awards are not assumed, continued or substituted in accordance with Section 6(c)(i). With respect to the vesting of Awards that will accelerate upon the occurrence of a Corporate Transaction pursuant to this subsection (ii) and are settled in the form of a cash payment, such cash payment will be made no later than 30 days following the occurrence of the Corporate Transaction or such later date as required to comply with Section 409A of the Code.

(iii) Awards Held by Persons other than Current Participants. In the event of a Corporate Transaction in which the surviving corporation or acquiring corporation (or its parent company) does not assume or continue such outstanding Awards or substitute similar awards for such outstanding Awards, then with respect to Awards that have not been assumed, continued or substituted and that are held by persons other than Current Participants, such Awards will terminate if not exercised (if applicable) prior to the occurrence of the Corporate Transaction; provided, however, that any reacquisition or repurchase rights held by the Company with respect to such Awards will not terminate and may continue to be exercised notwithstanding the Corporate Transaction.

(iv) Payment for Awards in Lieu of Exercise. Notwithstanding the foregoing, in the event an Award will terminate if not exercised prior to the effective time of a Corporate Transaction, the Board may provide, in its sole discretion, that the holder of such Award may not exercise such Award but will receive a payment, in such form as may be determined by the Board, equal in value, at the effective time, to the excess, if any, of (1) the value of the property the Participant would have received upon the exercise of the Award (including, at the discretion of the Board, any unvested portion of such Award), over (2) any exercise price payable by such holder in connection with such exercise.

(d) Appointment of Stockholder Representative. As a condition to the receipt of an Award under this Plan, a Participant will be deemed to have agreed that the Award will be subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on the Participant's behalf with respect to any escrow, indemnities and any contingent consideration.

(e) No Restriction on Right to Undertake Transactions. The grant of any Award under the Plan and the issuance of shares pursuant to any Award does not affect or restrict in any way the right or power of the Company, the Board or the stockholders of the Company to make or authorize any adjustment, recapitalization, reorganization or other change in the Company's capital structure or its business, any Change in Control, any Corporate Transaction, any merger or consolidation of the Company, any issue of stock or of options, rights or options to purchase stock or of bonds, debentures, preferred or prior preference stocks whose rights are superior to or affect the Common Stock or the rights thereof or which are convertible into or exchangeable for Common Stock, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

7. ADMINISTRATION.

(a) Administration by Board. The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in subsection (c) below.

(b) Powers of Board. The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine from time to time (1) which of the persons eligible under the Plan will be granted Awards; (2) when and how each Award will be granted; (3) what type or combination of types of Award will be granted; (4) the provisions of each Award granted (which need not be identical), including the time or times when a person will be permitted to receive an issuance of Common Stock or other payment pursuant to an Award; (5) the number of shares of Common Stock or cash equivalent with respect to which an Award will be granted to each such person; (6) the Fair Market Value applicable to an Award; and (7) the terms of any Performance Award that is not valued in whole or in part by reference to, or otherwise based on, the Common Stock, including the amount of cash payment or other property that may be earned and the timing of payment.

(ii) To construe and interpret the Plan and Awards granted under it, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan or in any Award Agreement, in a manner and to the extent it deems necessary or expedient to make the Plan or Award fully effective.

(iii) To settle all controversies regarding the Plan and Awards granted under it.

(iv) To accelerate the time at which an Award may first be exercised or the time during which an Award or any part thereof will vest, notwithstanding the provisions in the Award Agreement stating the time at which it may first be exercised or the time during which it will vest.

(v) To prohibit the exercise of any Option, SAR or other exercisable Award during a period of up to 30 days prior to the consummation of any pending stock dividend, stock split, combination or exchange of shares, merger, consolidation or other distribution (other than normal cash dividends) of Company assets to stockholders, or any other change affecting the shares of Common Stock or the share price of the Common Stock including any Corporate Transaction, for reasons of administrative convenience.

(vi) To suspend or terminate the Plan at any time. Suspension or termination of the Plan will not Materially Impair rights and obligations under any Award granted while the Plan is in effect except with the written consent of the affected Participant.

(vii) To amend the Plan in any respect the Board deems necessary or advisable; provided, however, that stockholder approval will be required for any amendment to the extent required by Applicable Law. Except as provided above, rights under any Award granted before amendment of the Plan will not be Materially Impaired by any amendment of the Plan unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(viii) To submit any amendment to the Plan for stockholder approval.

(ix) To approve forms of Award Agreements for use under the Plan and to amend the terms of any one or more Awards, including, but not limited to, amendments to provide terms more favorable to the Participant than previously provided in the Award Agreement, subject to any specified limits in the Plan that are not subject to Board discretion; *provided however*, that, a Participant's rights under any Award will not be Materially Impaired by any such amendment unless (1) the Company requests the consent of the affected Participant, and (2) such Participant consents in writing.

(x) Generally, to exercise such powers and to perform such acts as the Board deems necessary or expedient to promote the best interests of the Company and that are not in conflict with the provisions of the Plan or Awards.

(xi) To adopt such procedures and sub-plans as are necessary or appropriate to permit and facilitate participation in the Plan by, or take advantage of specific tax treatment for Awards granted to, Employees, Directors or Consultants who are non-U.S. nationals or employed outside the United States (provided that Board approval will not be necessary for immaterial modifications to the Plan or any Award Agreement to ensure or facilitate compliance with the laws of the relevant non-U.S. jurisdiction).

(xii) To effect, at any time and from time to time, subject to the consent of any Participant whose Award is Materially Impaired by such action, (1) the reduction of the exercise price (or strike price) of any outstanding Option or SAR; (2) the cancellation of any outstanding Option or SAR and the grant in substitution thereof of (A) a new Option, SAR, Restricted Stock Award, RSU Award or Other Award, under the Plan or another equity plan of the Company, covering the same or a different number of shares of Common Stock, (B) cash and/or (C) other valuable consideration (as determined by the Board); or (3) any other action that is treated as a repricing under generally accepted accounting principles.

(c) Delegation to Committee.

(i) General. The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration of the Plan is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to another Committee or a subcommittee of the Committee any of the administrative powers the Committee is authorized to exercise (and references in this Plan to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. Each Committee may retain the authority to concurrently administer the Plan with the Committee or subcommittee to which it has delegated its authority hereunder and may, at any time, revest in such Committee some or all of the powers previously delegated. The Board may retain the authority to concurrently administer the Plan with any Committee and may, at any time, revest in the Board some or all of the powers previously delegated.

(ii) Rule 16b-3 Compliance. To the extent an Award is intended to qualify for the exemption from Section 16(b) of the Exchange Act that is available under Rule 16b-3 of the Exchange Act, the Award will be granted by the Board or a Committee that consists solely of two or more Non-Employee Directors, as determined under Rule 16b-3(b)(3) of the Exchange Act and thereafter any action establishing or modifying the terms of the Award will be approved by the Board or a Committee meeting such requirements to the extent necessary for such exemption to remain available.

(d) Effect of Board's Decision. All determinations, interpretations and constructions made by the Board or any Committee in good faith will not be subject to review by any person and will be final, binding and conclusive on all persons.

(e) Delegation to Other Person or Body. The Board or any Committee may delegate to one or more persons or bodies the authority to do one or more of the following to the extent permitted by Applicable Law: (i) designate recipients, other than Officers, of Options and SARs (and, to the extent permitted by Applicable Law, other Awards), provided that no person or body may be delegated authority to grant an Award to itself; (ii) determine the number of shares subject to such Awards; and (iii) determine the terms of such Awards; provided, however, that the Board or Committee action regarding such delegation will fix the terms of such delegation in accordance with Applicable Law, including without limitation Sections 152 and 157 of the Delaware General Corporation Law. Unless provided otherwise in the Board or Committee action regarding such delegation, each Award granted pursuant to this section will be granted on the

applicable form of Award Agreement most recently approved for use by the Board or the Committee, with any modifications necessary to incorporate or reflect the terms of such Award. Notwithstanding anything to the contrary herein, neither the Board nor any Committee may delegate to any person or body (who is not a Director or that is not comprised solely of Directors, respectively) the authority to determine the Fair Market Value.

8. TAX WITHHOLDING.

(a) Withholding Authorization. As a condition to acceptance of any Award under the Plan, a Participant authorizes withholding from payroll and any other amounts payable to such Participant, and otherwise agrees to make adequate arrangements to satisfy the Tax-Related Items withholding obligations, if any, of the Company and/or an Affiliate that arise in connection with the grant, vesting, exercise or settlement of such Award, as applicable. Accordingly, a Participant may not be able to exercise an Award even though the Award is vested, and the Company shall have no obligation to issue shares of Common Stock subject to an Award, unless and until such obligations are satisfied.

(b) Satisfaction of Withholding Obligation. To the extent permitted by the terms of an Award Agreement, the Company may, in its sole discretion, satisfy any Tax-Related Items withholding obligation relating to an Award by any of the following means or by a combination of such means: (i) causing the Participant to tender a cash payment; (ii) withholding shares of Common Stock from the shares of Common Stock issued or otherwise issuable to the Participant in connection with the Award; (iii) withholding cash from an Award settled in cash; (iv) withholding payment from any amounts otherwise payable to the Participant; (v) by allowing a Participant to effectuate a “cashless exercise” pursuant to a program developed under Regulation T as promulgated by the U.S. Federal Reserve Board; or (vi) by such other method as may be set forth in the Award Agreement.

(c) No Obligation to Notify or Minimize Taxes; No Liability to Claims. Except as required by Applicable Law, the Company has no duty or obligation to any Participant to advise such holder as to the time or manner of exercising such Award. Furthermore, the Company has no duty or obligation to warn or otherwise advise such holder of a pending termination or expiration of an Award or a possible period in which the Award may not be exercised. The Company has no duty or obligation to minimize the tax consequences of an Award to the holder of such Award and will not be liable to any holder of an Award for any adverse tax consequences to such holder in connection with an Award. As a condition to accepting an Award under the Plan, each Participant (i) agrees to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from such Award or other Company compensation and (ii) acknowledges that such Participant was advised to consult with his or her own personal tax, financial and other legal advisors regarding the tax consequences of the Award and has either done so or knowingly and voluntarily declined to do so. Additionally, each Participant acknowledges any Option or SAR granted under the Plan is exempt from Section 409A only if the exercise or strike price is at least equal to the “fair market value” of the Common Stock on the date of grant as determined by the U.S. Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Award. Additionally, as a condition to accepting an Option or SAR granted under the Plan, each Participant agrees to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the U.S. Internal Revenue Service asserts that such exercise price or strike price is less than the “fair market value” of the Common Stock on the date of grant as subsequently determined by the U.S. Internal Revenue Service.

(d) Withholding Indemnification. The Company and/or its Affiliate may withhold or account for Tax-Related Items by considering statutory or other withholding rates, including minimum or maximum rates applicable in a Participant's jurisdiction. In the event of overwithholding, the Participant may receive a refund of any over-withheld amount in cash (with no entitlement to the equivalent in Common Stock) or, if not refunded, the Participant may seek a refund from the local tax authorities. In the event of underwithholding, the Participant may be required to pay any additional Tax-Related Items directly to the applicable tax authority or to the Company and/or its Affiliate. As a condition to accepting an Award under the Plan, in the event that the amount of the Company's and/or its Affiliate's withholding obligation in connection with such Award was greater than the amount actually withheld by the Company and/or its Affiliates, each Participant agrees to indemnify and hold the Company and/or its Affiliates harmless from any failure by the Company and/or its Affiliates to withhold the proper amount. Further, if the obligation for Tax-Related Items is satisfied by withholding in shares of Common Stock, for tax purposes, the Participant will be deemed to have been issued the full number of shares subject to the Award, notwithstanding that a number of the shares is held back solely for the purpose of paying the Tax-Related Items.

9. MISCELLANEOUS.

(a) Source of Shares. The stock issuable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market or otherwise.

(b) Use of Proceeds from Sales of Common Stock. Proceeds from the sale of shares of Common Stock pursuant to Awards will constitute general funds of the Company.

(c) Corporate Action Constituting Grant of Awards. Corporate action constituting a grant by the Company of an Award to any Participant will be deemed completed as of the date of such corporate action, unless otherwise determined by the Board, regardless of when the instrument, certificate, or letter evidencing the Award is communicated to, or actually received or accepted by, the Participant. In the event that the corporate records (e.g., Board consents, resolutions or minutes) documenting the corporate action approving the grant contain terms (e.g., exercise price, vesting schedule or number of shares) that are inconsistent with those in the Award Agreement or related grant documents as a result of a clerical error in the Award Agreement or related grant documents, the corporate records will control and the Participant will have no legally binding right to the incorrect term in the Award Agreement or related grant documents.

(d) Stockholder Rights. No Participant will be deemed to be the holder of, or to have any of the rights of a holder with respect to, any shares of Common Stock subject to such Award unless and until (i) such Participant has satisfied all requirements for exercise of the Award pursuant to its terms, if applicable, and (ii) the issuance of the Common Stock subject to such Award is reflected in the records of the Company.

(e) No Employment or Other Service Rights. Nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award granted pursuant thereto will confer upon any Participant any right to continue to serve the Company or an Affiliate in the capacity in effect at the time the Award was granted or affect the right of the Company or an Affiliate to terminate at will (unless otherwise required under Applicable Law) and without regard to any future vesting opportunity that a Participant may have with respect to any Award (i) the employment of an Employee with or without notice and with or without cause, (ii) the service of a Consultant pursuant to the terms of such Consultant's agreement with the Company or an Affiliate, or (iii) the service of a Director pursuant to the Bylaws of the Company or an Affiliate, and any applicable provisions of the corporate law of the U.S. state or non-U.S. jurisdiction in which the Company or the Affiliate is incorporated, as the case may be. Further, nothing in the Plan, any Award Agreement or any other instrument executed thereunder or in connection with any Award will constitute any promise or commitment by the Company or an Affiliate regarding the fact or nature of future positions, future work assignments, future compensation or any other term or condition of employment or service or confer any right or benefit under the Award or the Plan unless such right or benefit has specifically accrued under the terms of the Award Agreement and/or Plan.

(f) Change in Time Commitment. In the event a Participant's regular level of time commitment in the performance of his or her services for the Company and any Affiliates is reduced (for example, and without limitation, if the Participant is an Employee of the Company and the Employee has a change in status from a full-time Employee to a part-time Employee or takes an extended leave of absence) after the date of grant of any Award to the Participant, the Board may determine, to the extent permitted by Applicable Law, to (i) make a corresponding reduction in the number of shares or cash amount subject to any portion of such Award that is scheduled to vest or become payable after the date of such change in time commitment, and (ii) in lieu of or in combination with such a reduction, extend the vesting or payment schedule applicable to such Award. In the event of any such reduction, the Participant will have no right with respect to any portion of the Award that is so reduced or extended.

(g) Execution of Additional Documents. As a condition to accepting an Award under the Plan, the Participant agrees to execute any additional documents or instruments necessary or desirable, as determined in the Plan Administrator's sole discretion, to carry out the purposes or intent of the Award, or facilitate compliance with securities and/or other regulatory requirements, in each case at the Plan Administrator's request.

(h) Electronic Delivery and Participation. Any reference herein or in an Award Agreement to a "written" agreement or document will include any agreement or document delivered electronically, filed publicly at www.sec.gov (or any successor website thereto) or posted on the Company's intranet (or other shared electronic medium controlled by the Company to which the Participant has access). By accepting any Award the Participant consents to receive documents by electronic delivery and to participate in the Plan through any on-line electronic system established and maintained by the Plan Administrator or another third party selected by the Plan Administrator. The form of delivery of any Common Stock (e.g., a stock certificate or electronic entry evidencing such shares) shall be determined by the Company.

(i) Clawback/Recovery. All Awards granted under the Plan will be subject to recoupment in accordance with any clawback policy that the Company is required to adopt pursuant to the listing standards of any national securities exchange or association on which the Company's securities are listed or as is otherwise required by the U.S. Dodd-Frank Wall Street Reform and Consumer Protection Act or other Applicable Law and any clawback policy that the Company otherwise adopts, to the extent applicable and permissible under Applicable Law. In addition, the Board may impose such other clawback, recovery or recoupment provisions in an Award Agreement as the Board determines necessary or appropriate, including but not limited to a reacquisition right in respect of previously acquired shares of Common Stock or other cash or property upon the occurrence of Cause. No recovery of compensation under such a clawback policy will be an event giving rise to a Participant's right to voluntarily terminate employment upon a "resignation for good reason," or for a "constructive termination" or any similar term under any plan of or agreement with the Company.

(j) Securities Law Compliance. A Participant will not be issued any shares in respect of an Award unless either (i) the shares are registered under the Securities Act; or (ii) the Company has determined that such issuance would be exempt from the registration requirements of the Securities Act. Each Award also must comply with other Applicable Law governing the Award, and a Participant will not receive such shares if the Company determines that such receipt would not be in material compliance with Applicable Law.

(k) Transfer or Assignment of Awards; Issued Shares. Except as expressly provided in the Plan or the form of Award Agreement, Awards granted under the Plan may not be transferred or assigned by the Participant. After the vested shares subject to an Award have been issued, or in the case of a Restricted Stock Award and similar awards, after the issued shares have vested, the holder of such shares is free to assign, hypothecate, donate, encumber or otherwise dispose of any interest in such shares provided that any such actions are in compliance with the provisions herein, the terms of the Trading Policy and Applicable Law.

(l) Effect on Other Employee Benefit Plans. The value of any Award granted under the Plan, as determined upon grant, vesting or settlement, shall not be included as compensation, earnings, salaries, or other similar terms used when calculating any Participant's benefits under any employee benefit plan sponsored by the Company or any Affiliate, except as such plan otherwise expressly provides. The Company expressly reserves its rights to amend, modify, or terminate any of the Company's or any Affiliate's employee benefit plans.

(m) Deferrals. To the extent permitted by Applicable Law, the Board, in its sole discretion, may determine that the delivery of Common Stock or the payment of cash, upon the exercise, vesting or settlement of all or a portion of any Award may be deferred and may also establish programs and procedures for deferral elections to be made by Participants. Deferrals will be made in accordance with the requirements of Section 409A.

(n) Section 409A. Unless otherwise expressly provided for in an Award Agreement, the Plan and Award Agreements will be interpreted to the greatest extent possible in a manner that makes the Plan and the Awards granted hereunder exempt from Section 409A, and, to the extent not so exempt, in compliance with the requirements of Section 409A. If the Board determines that any Award granted hereunder is not exempt from and is therefore subject to Section 409A, the

Award Agreement evidencing such Award will incorporate the terms and conditions necessary to avoid the consequences specified in Section 409A(a)(1) of the Code, and to the extent an Award Agreement is silent on terms necessary for compliance, such terms are hereby incorporated by reference into the Award Agreement. Notwithstanding anything to the contrary in this Plan (and unless the Award Agreement specifically provides otherwise), if the shares of Common Stock are publicly traded, and if a Participant holding an Award that constitutes “deferred compensation” under Section 409A is a “specified employee” for purposes of Section 409A, no distribution or payment of any amount that is due because of a “separation from service” (as defined in Section 409A without regard to alternative definitions thereunder) will be issued or paid before the date that is six months and one day following the date of such Participant’s “separation from service” or, if earlier, the date of the Participant’s death, unless such distribution or payment can be made in a manner that complies with Section 409A, and any amounts so deferred will be paid in a lump sum on the day after such six month period elapses, with the balance paid thereafter on the original schedule.

(o) Choice of Law. This Plan and any controversy arising out of or relating to this Plan shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

10. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each regulatory commission or agency, as may be deemed to be necessary, having jurisdiction over the Plan such authority as may be required to grant Awards and to issue and sell shares of Common Stock upon exercise or vesting of the Awards; provided, however, that this undertaking will not require the Company to register under the Securities Act the Plan, any Award or any Common Stock issued or issuable pursuant to any such Award. If, after reasonable efforts and at a reasonable cost, the Company is unable to obtain from any such regulatory commission or agency the authority that counsel for the Company deems necessary or advisable for the lawful issuance and sale of Common Stock under the Plan, the Company will be relieved from any liability for failure to issue and sell Common Stock upon exercise or vesting of such Awards unless and until such authority is obtained. A Participant is not eligible for the grant of an Award or the subsequent issuance of Common Stock pursuant to the Award if such grant or issuance would be in violation of any Applicable Law.

11. ADDITIONAL RULES FOR AWARDS SUBJECT TO SECTION 409A.

(a) Application. Unless the provisions of this Section of the Plan are expressly superseded by the provisions in the form of Award Agreement, the provisions of this Section shall apply and shall supersede anything to the contrary set forth in the Award Agreement for a Non-Exempt Award.

(b) Non-Exempt Awards Subject to Non-Exempt Severance Arrangements. To the extent a Non-Exempt Award is subject to Section 409A due to application of a Non-Exempt Severance Arrangement, the following provisions of this subsection (b) apply.

(i) If the Non-Exempt Award vests in the ordinary course during the Participant's Continuous Service in accordance with the vesting schedule set forth in the Award Agreement, and does not accelerate vesting under the terms of a Non-Exempt Severance Arrangement, in no event will the shares be issued in respect of such Non-Exempt Award any later than the later of: (i) December 31st of the calendar year that includes the applicable vesting date, or (ii) the 60th day that follows the applicable vesting date.

(ii) If vesting of the Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with the Participant's Separation from Service, and such vesting acceleration provisions were in effect as of the date of grant of the Non-Exempt Award and, therefore, are part of the terms of such Non-Exempt Award as of the date of grant, then the shares will be earlier issued in settlement of such Non-Exempt Award upon the Participant's Separation from Service in accordance with the terms of the Non-Exempt Severance Arrangement, but in no event later than the 60th day that follows the date of the Participant's Separation from Service. However, if at the time the shares would otherwise be issued the Participant is subject to the distribution limitations contained in Section 409A applicable to "specified employees," as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date that is six months following the date of such Participant's Separation from Service, or, if earlier, the date of the Participant's death that occurs within such six-month period.

(iii) If vesting of a Non-Exempt Award accelerates under the terms of a Non-Exempt Severance Arrangement in connection with a Participant's Separation from Service, and such vesting acceleration provisions were not in effect as of the date of grant of the Non-Exempt Award and, therefore, are not a part of the terms of such Non-Exempt Award on the date of grant, then such acceleration of vesting of the Non-Exempt Award shall not accelerate the issuance date of the shares, but the shares shall instead be issued on the same schedule as set forth in the Grant Notice as if they had vested in the ordinary course during the Participant's Continuous Service, notwithstanding the vesting acceleration of the Non-Exempt Award. Such issuance schedule is intended to satisfy the requirements of payment on a specified date or pursuant to a fixed schedule, as provided under U.S. Treasury Regulations Section 1.409A-3(a)(4).

(c) Treatment of Non-Exempt Awards Upon a Corporate Transaction for Employees and Consultants. The provisions of this subsection (c) shall apply and shall supersede anything to the contrary set forth in the Plan with respect to the permitted treatment of any Non-Exempt Award in connection with a Corporate Transaction if the Participant was either an Employee or Consultant upon the applicable date of grant of the Non-Exempt Award.

(i) Vested Non-Exempt Awards. The following provisions shall apply to any Vested Non-Exempt Award in connection with a Corporate Transaction:

(1) If the Corporate Transaction is also a Section 409A Change in Control then the Acquiring Entity may not assume, continue or substitute the Vested Non-Exempt Award. Upon the Section 409A Change in Control the settlement of the Vested Non-Exempt Award will automatically be accelerated and the shares will be immediately issued in respect of the Vested Non-Exempt Award. Alternatively, the Company may instead provide that the Participant will receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control.

(2) If the Corporate Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute each Vested Non-Exempt Award. The shares to be issued in respect of the Vested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of the Fair Market Value of the shares made on the date of the Corporate Transaction.

(ii) Unvested Non-Exempt Awards. The following provisions shall apply to any Unvested Non-Exempt Award unless otherwise determined by the Board or as otherwise required by applicable law.

(1) In the event of a Corporate Transaction, the Acquiring Entity shall assume, continue or substitute any Unvested Non-Exempt Award. Unless otherwise determined by the Board, any Unvested Non-Exempt Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Corporate Transaction. The shares to be issued in respect of any Unvested Non-Exempt Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value of the shares made on the date of the Corporate Transaction.

(2) If the Acquiring Entity will not assume, substitute or continue any Unvested Non-Exempt Award in connection with a Corporate Transaction, then such Award shall automatically terminate and be forfeited upon the Corporate Transaction with no consideration payable to any Participant in respect of such forfeited Unvested Non-Exempt Award. Notwithstanding the foregoing, to the extent permitted and in compliance with the requirements of Section 409A, the Board may in its discretion determine to elect to accelerate the vesting and settlement of the Unvested Non-Exempt Award upon the Corporate Transaction, or instead substitute a cash payment equal to the Fair Market Value of such shares that would otherwise be issued to the Participant, as further provided in subsection (e)(ii) below. In the absence of such discretionary election by the Board, any Unvested Non-Exempt Award shall be forfeited without payment of any consideration to the affected Participants if the Acquiring Entity will not assume, substitute or continue the Unvested Non-Exempt Awards in connection with the Corporate Transaction.

(3) The foregoing treatment shall apply with respect to all Unvested Non-Exempt Awards upon any Corporate Transaction, and regardless of whether or not such Corporate Transaction is also a Section 409A Change in Control.

(d) Treatment of Non-Exempt Awards Upon a Corporate Transaction for Non-Employee Directors. The following provisions of this subsection (d) shall apply and shall supersede anything to the contrary that may be set forth in the Plan with respect to the permitted treatment of a Non-Exempt Director Award in connection with a Corporate Transaction.

(i) If the Corporate Transaction is also a Section 409A Change in Control then the Acquiring Entity may not assume, continue or substitute the Non-Exempt Director Award. Upon the Section 409A Change in Control the vesting and settlement of any Non-Exempt Director Award will automatically be accelerated and the shares will be immediately issued to the Participant in respect of the Non-Exempt Director Award. Alternatively, the Company may provide that the Participant will instead receive a cash settlement equal to the Fair Market Value of the shares that would otherwise be issued to the Participant upon the Section 409A Change in Control pursuant to the preceding provision.

(ii) If the Corporate Transaction is not also a Section 409A Change in Control, then the Acquiring Entity must either assume, continue or substitute the Non-Exempt Director Award. Unless otherwise determined by the Board, the Non-Exempt Director Award will remain subject to the same vesting and forfeiture restrictions that were applicable to the Award prior to the Corporate Transaction. The shares to be issued in respect of the Non-Exempt Director Award shall be issued to the Participant by the Acquiring Entity on the same schedule that the shares would have been issued to the Participant if the Corporate Transaction had not occurred. In the Acquiring Entity's discretion, in lieu of an issuance of shares, the Acquiring Entity may instead substitute a cash payment on each applicable issuance date, equal to the Fair Market Value of the shares that would otherwise be issued to the Participant on such issuance dates, with the determination of Fair Market Value made on the date of the Corporate Transaction.

(e) If the RSU Award is a Non-Exempt Award, then the provisions in this Section 11(e) shall apply and supersede anything to the contrary that may be set forth in the Plan or the Award Agreement with respect to the permitted treatment of such Non-Exempt Award:

(i) Any exercise by the Board of discretion to accelerate the vesting of a Non-Exempt Award shall not result in any acceleration of the scheduled issuance dates for the shares in respect of the Non-Exempt Award unless earlier issuance of the shares upon the applicable vesting dates would be in compliance with the requirements of Section 409A.

(ii) The Company explicitly reserves the right to earlier settle any Non-Exempt Award to the extent permitted and in compliance with the requirements of Section 409A, including pursuant to any of the exemptions available in U.S. Treasury Regulations Section 1.409A-3(j)(4)(ix).

(iii) To the extent the terms of any Non-Exempt Award provide that it will be settled upon a Change in Control or Corporate Transaction, to the extent it is required for compliance with the requirements of Section 409A, the Change in Control or Corporate Transaction event triggering settlement must also constitute a Section 409A Change in Control. To the extent the terms of a Non-Exempt Award provides that it will be settled upon a termination of employment or termination of Continuous Service, to the extent it is required for compliance with the requirements of Section 409A, the termination event triggering settlement must also

constitute a Separation From Service. However, if at the time the shares would otherwise be issued to a Participant in connection with a “separation from service” such Participant is subject to the distribution limitations contained in Section 409A applicable to “specified employees,” as defined in Section 409A(a)(2)(B)(i) of the Code, such shares shall not be issued before the date that is six months following the date of the Participant’s Separation From Service, or, if earlier, the date of the Participant’s death that occurs within such six month period.

(iv) The provisions in this subsection (e) for delivery of the shares in respect of the settlement of an RSU Award that is a Non-Exempt Award are intended to comply with the requirements of Section 409A so that the delivery of the shares to the Participant in respect of such Non-Exempt Award will not trigger the additional tax imposed under Section 409A, and any ambiguities herein will be so interpreted.

12. SEVERABILITY.

If all or any part of the Plan or any Award Agreement is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity shall not invalidate any portion of the Plan or such Award Agreement not declared to be unlawful or invalid. Any Section of the Plan or any Award Agreement (or part of such a Section) so declared to be unlawful or invalid shall, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. TERMINATION OF THE PLAN.

The Board may suspend or terminate the Plan at any time. No Incentive Stock Options may be granted after the tenth anniversary of the earlier of: (i) the Adoption Date, or (ii) the date the Plan is approved by the Company’s stockholders. No Awards may be granted under the Plan while the Plan is suspended or after it is terminated.

14. DEFINITIONS.

As used in the Plan, the following definitions apply to the capitalized terms indicated below:

(a) “**Acquiring Entity**” means the surviving or acquiring corporation (or its parent company) in connection with a Corporate Transaction.

(b) “**Adoption Date**” means the date the Plan is first approved by the Board or Compensation Committee, as applicable.

(c) “**Affiliate**” means, at the time of determination, any “parent” or “subsidiary” of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board may determine the time or times at which “parent” or “subsidiary” status is determined within the foregoing definition.

(d) “**Applicable Law**” means the Code and any applicable U.S. and non-U.S. securities, exchange control, tax, federal, state, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (including under the authority of any applicable self-regulating organization such as the Nasdaq Stock Market, New York Stock Exchange, or the Financial Industry Regulatory Authority).

(e) “**Award**” means any right to receive Common Stock, cash or other property granted under the Plan (including an Incentive Stock Option, a Nonstatutory Stock Option, a Restricted Stock Award, an RSU Award, a SAR, a Performance Award or any Other Award).

(f) “**Award Agreement**” means a written or electronic agreement between the Company and a Participant evidencing the terms and conditions of an Award. The Award Agreement generally consists of the Grant Notice and the agreement containing the written summary of the general terms and conditions applicable to the Award and which is provided, including through electronic means, to a Participant along with the Grant Notice.

(g) “**Board**” means the Board of Directors of the Company (or its designee). Any decision or determination made by the Board shall be a decision or determination that is made in the sole discretion of the Board (or its designee), and such decision or determination shall be final and binding on all Participants.

(h) “**Capital Stock**” means each and every class of common stock of the Company, regardless of the number of votes per share

(i) “**Capitalization Adjustment**” means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Award after the Adoption Date without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, reverse stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or any similar equity restructuring transaction, as that term is used in Statement of Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(j) “**Cause**” will have the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, such term means, with respect to a Participant, the occurrence of any of the following events: (i) such Participant’s commission of any felony or any crime involving fraud, dishonesty or moral turpitude under the laws of the United States or any state thereof; (ii) such Participant’s attempted commission of, or participation in, a fraud or act of dishonesty against the Company, or any of its employees or directors; (iii) such Participant’s intentional, material violation of any contract or agreement between the Participant and the Company, the Company’s employment policies, or of any statutory or other duty owed to the Company; (iv) such Participant’s unauthorized use or disclosure of the Company’s confidential information or trade secrets; or (v) such Participant’s gross misconduct. The determination that a termination of the Participant’s Continuous Service is either for Cause or without Cause will be made by the Company, in its sole discretion. Any determination by the Company that the Continuous Service of a Participant was terminated with or without Cause for the purposes of outstanding Awards held by such Participant will have no effect upon any determination of the rights or obligations of the Company or such Participant for any other purpose.

(k) “**Change in Control**” or “**Change of Control**” means the occurrence, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) any Exchange Act Person becomes the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities other than by virtue of a merger, consolidation or similar transaction. Notwithstanding the foregoing, a Change in Control shall not be deemed to occur (A) on account of the acquisition of securities of the Company directly from the Company, (B) on account of the acquisition of securities of the Company by an investor, any affiliate thereof or any other Exchange Act Person that acquires the Company’s securities in a transaction or series of related transactions the primary purpose of which is to obtain financing for the Company through the issuance of equity securities, or (C) solely because the level of Ownership held by any Exchange Act Person (the “*Subject Person*”) exceeds the designated percentage threshold of the outstanding voting securities as a result of a repurchase or other acquisition of voting securities by the Company reducing the number of shares outstanding, provided that if a Change in Control would occur (but for the operation of this sentence) as a result of the acquisition of voting securities by the Company, and after such share acquisition, the Subject Person becomes the Owner of any additional voting securities that, assuming the repurchase or other acquisition had not occurred, increases the percentage of the then outstanding voting securities Owned by the Subject Person over the designated percentage threshold, then a Change in Control shall be deemed to occur;

(ii) there is consummated a merger, consolidation or similar transaction involving (directly or indirectly) the Company and, immediately after the consummation of such merger, consolidation or similar transaction, the stockholders of the Company immediately prior thereto do not Own, directly or indirectly, either (A) outstanding voting securities representing more than 50% of the combined outstanding voting power of the Acquiring Entity in such merger, consolidation or similar transaction or (B) more than 50% of the combined outstanding voting power of the parent of the Acquiring Entity in such merger, consolidation or similar transaction, in each case in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such transaction;

(iii) there is consummated a sale, lease, exclusive license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries, other than a sale, lease, license or other disposition of all or substantially all of the consolidated assets of the Company and its Subsidiaries to an Entity, more than 50% of the combined voting power of the voting securities of which are Owned by stockholders of the Company in substantially the same proportions as their Ownership of the outstanding voting securities of the Company immediately prior to such sale, lease, license or other disposition; or

(iv) individuals who, on the Adoption Date, are members of the Board (the “**Incumbent Board**”) cease for any reason to constitute at least a majority of the members of the Board; provided, however, that if the appointment or election (or nomination for election) of any new Board member was approved or recommended by a majority vote of the members of the Incumbent Board then still in office, such new member shall, for purposes of this Plan, be considered as a member of the Incumbent Board.

Notwithstanding the foregoing or any other provision of this Plan, (A) the term Change in Control shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, (B) the definition of Change in Control (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Awards subject to such agreement; provided, however, that if no definition of Change in Control or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply, and (C) with respect to any nonqualified deferred compensation that becomes payable on account of the Change in Control, the transaction or event described in clause (i), (ii), (iii), or (iv) also constitutes a Section 409A Change in Control if required in order for the payment not to violate Section 409A of the Code.

(l) “**Code**” means the U.S. Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(m) “**Committee**” means the Compensation Committee and any other committee of one or more Directors to whom authority has been delegated by the Board or Compensation Committee in accordance with the Plan.

(n) “**Common Stock**” means, as of the IPO Date, the Class A common stock of the Company.

(o) “**Company**” means Artiva Biotherapeutics, Inc., a Delaware corporation.

(p) “**Compensation Committee**” means the Compensation Committee of the Board.

(q) “**Consultant**” means any person, including an advisor, who is (i) engaged by the Company or an Affiliate to render consulting or advisory services and is compensated for such services, or (ii) serving as a member of the board of directors of an Affiliate and is compensated for such services. However, service solely as a Director, or payment of a fee for such service, will not cause a Director to be considered a “Consultant” for purposes of the Plan. Notwithstanding the foregoing, a person is treated as a Consultant under this Plan only if a Form S-8 Registration Statement under the Securities Act is available to register either the offer or the sale of the Company’s securities to such person.

(r) “**Continuous Service**” means that the Participant’s service with the Company or an Affiliate, whether as an Employee, Director or Consultant, is not interrupted or terminated. A change in the capacity in which the Participant renders service to the Company or an Affiliate as an Employee, Director or Consultant or a change in the Entity for which the Participant renders such service, provided that there is no interruption or termination of the Participant’s service with the Company or an Affiliate, will not terminate a Participant’s Continuous Service; provided, however, that if the Entity for which a Participant is rendering services ceases to qualify as an Affiliate, as determined by the Board, such Participant’s Continuous Service will be considered to have terminated on the date such Entity ceases to qualify as an Affiliate. For example, a change

in status from an Employee of the Company to a Consultant of an Affiliate or to a Director will not constitute an interruption of Continuous Service. To the extent permitted by Applicable Law, the Board or the chief executive officer of the Company, in that party's sole discretion, may determine whether Continuous Service will be considered interrupted in the case of (i) any leave of absence approved by the Company or an Affiliate, including sick leave, military leave or any other personal leave, or (ii) transfers between the Company, an Affiliate, or their successors. Notwithstanding the foregoing, a leave of absence will be treated as Continuous Service for purposes of vesting in an Award only to such extent as may be provided in the Company's leave of absence policy, in the written terms of any leave of absence agreement or policy applicable to the Participant, or as otherwise required by Applicable Law. In addition, to the extent required for exemption from or compliance with Section 409A, the determination of whether there has been a termination of Continuous Service will be made, and such term will be construed, in a manner that is consistent with the definition of "separation from service" as defined under U.S. Treasury Regulation Section 1.409A-1(h) (without regard to any alternative definition thereunder).

(s) "**Corporate Transaction**" means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board, of the consolidated assets of the Company and its Subsidiaries;

(ii) a sale or other disposition of at least 50% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

Notwithstanding the foregoing or any other provision of this Plan, (A) the term Corporate Transaction shall not include a sale of assets, merger or other transaction effected exclusively for the purpose of changing the domicile of the Company, (B) the definition of Corporate Transaction (or any analogous term) in an individual written agreement between the Company or any Affiliate and the Participant shall supersede the foregoing definition with respect to Awards subject to such agreement; provided, however, that if no definition of Corporate Transaction or any analogous term is set forth in such an individual written agreement, the foregoing definition shall apply, and (C) with respect to any nonqualified deferred compensation that becomes payable on account of the Corporate Transaction, the transaction or event described in clause (i), (ii), (iii), or (iv) also constitutes a Section 409A Change in Control if required in order for the payment not to violate Section 409A of the Code.

(t) “**Director**” means a member of the Board.

(u) “**determine**” or “**determined**” means as determined by the Board or the Committee (or its designee) in its sole discretion.

(v) “**Disability**” means, with respect to a Participant, such Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of not less than 12 months, as provided in Section 22(e)(3) of the Code, and will be determined by the Board on the basis of such medical evidence as the Board deems warranted under the circumstances.

(w) “**Effective Date**” means the IPO Date, provided that this Plan is approved by the Company’s stockholders prior to the IPO Date.

(x) “**Employee**” means any person employed by the Company or an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an “Employee” for purposes of the Plan.

(y) “**Employer**” means the Company or the Affiliate that employs the Participant.

(z) “**Entity**” means a corporation, partnership, limited liability company or other entity.

(aa) “**Exchange Act**” means the U.S. Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(bb) “**Exchange Act Person**” means any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act), except that “Exchange Act Person” will not include (i) the Company or any Subsidiary of the Company, (ii) any employee benefit plan of the Company or any Subsidiary of the Company or any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any Subsidiary of the Company, (iii) an underwriter temporarily holding securities pursuant to a registered public offering of such securities, (iv) an Entity Owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their Ownership of stock of the Company; or (v) any natural person, Entity or “group” (within the meaning of Section 13(d) or 14(d) of the Exchange Act) that, as of the Effective Date, is the Owner, directly or indirectly, of securities of the Company representing more than 50% of the combined voting power of the Company’s then outstanding securities.

(cc) “**Fair Market Value**” means, as of any date, unless otherwise determined by the Board, the value of the Common Stock (as determined on a per share or aggregate basis, as applicable) determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value will be the closing sales price for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) on the date of determination, as reported in a source the Board deems reliable.

(ii) If there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing selling price on the last preceding date for which such quotation exists.

(iii) In the absence of such markets for the Common Stock, or if otherwise determined by the Board, the Fair Market Value will be determined by the Board in good faith and in a manner that complies with Sections 409A and 422 of the Code.

(dd) “**Good Reason**” has the meaning ascribed to such term in any written agreement between the Participant and the Company defining such term and, in the absence of such agreement, means any of the following actions taken by the Company or a successor corporation or entity, with respect to a Participant, without the consent of such Participant (unless such action is taken in response to conduct by such Participant that constitutes Cause): (1) material reduction of the Participant’s base compensation, other than a reduction that applies generally to all employees of an approximately similar level (e.g., executives, vice presidents, director positions); (2) material reduction in such Participant’s authority, duties or responsibilities; provided, however, that a change in job position (including a change in title) will not be deemed a “material reduction” unless the Participant’s new authority, duties or responsibilities are materially reduced from the prior authority, duties or responsibilities; (3) failure or refusal of a successor to the Company to materially assume the Company’s obligations under each material agreement between such Participant and the Company in the event of a Change in Control; or (4) relocation of such Participant’s principal place of employment that results in an increase in the Participant’s one-way driving distance by more than 50 miles from such Participant’s then-current principal residence. In order to resign for Good Reason, a Participant must provide written notice of the event giving rise to Good Reason to the Company within 90 days after the condition arises, allow the Company 30 days to cure such condition, and if the Company fails to cure the condition within such period, the Participant’s resignation from all positions such Participant then holds with the Company must be effective not later than 90 days after the end of the Company’s cure period.

(ee) “**Governmental Body**” means any: (i) nation, state, commonwealth, , province, territory, county, municipality, district or other jurisdiction of any nature; (ii) U.S. or non-U.S. federal, state, local, municipal, or other government; (iii) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or Entity and any court or other tribunal, and for the avoidance of doubt, any Tax authority) or other body exercising similar powers or authority; or (iv) self-regulatory organization (including the Nasdaq Stock Market, New York Stock Exchange, and the Financial Industry Regulatory Authority).

(ff) “**Grant Notice**” means the notice provided to a Participant that he or she has been granted an Award under the Plan and which includes the name of the Participant, the type of Award, the date of grant of the Award, number of shares of Common Stock subject to the Award or potential cash payment right, (if any), the vesting schedule for the Award (if any) and other key terms applicable to the Award.

(gg) “**Incentive Stock Option**” means an option granted pursuant to Section 4 of the Plan that is intended to be, and qualifies as, an “incentive stock option” within the meaning of Section 422 of the Code.

(hh) “**IPO Date**” means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(ii) “**Materially Impair**” means any amendment to the terms of the Award that materially adversely affects the Participant’s rights under the Award. A Participant’s rights under an Award will not be deemed to have been Materially Impaired by any such amendment if the Board, in its sole discretion, determines that the amendment, taken as a whole, does not materially impair the Participant’s rights. For example, the following types of amendments to the terms of an Award do not Materially Impair the Participant’s rights under the Award: (i) imposition of reasonable restrictions on the minimum number of shares subject to an Option or SAR that may be exercised; (ii) to maintain the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iii) to change the terms of an Incentive Stock Option in a manner that disqualifies, impairs or otherwise affects the qualified status of the Award as an Incentive Stock Option under Section 422 of the Code; (iv) to clarify the manner of exemption from, or to bring the Award into compliance with or qualify it for an exemption from, Section 409A; or (v) to comply with other Applicable Laws.

(jj) “**Non-Employee Director**” means a Director who either (i) is not a current employee or officer of the Company or an Affiliate, does not receive compensation, either directly or indirectly, from the Company or an Affiliate for services rendered as a consultant or in any capacity other than as a Director (except for an amount as to which disclosure would not be required under Item 404(a) of Regulation S-K promulgated pursuant to the Securities Act (“**Regulation S-K**”)), does not possess an interest in any other transaction for which disclosure would be required under Item 404(a) of Regulation S-K, and is not engaged in a business relationship for which disclosure would be required pursuant to Item 404(b) of Regulation S-K; or (ii) is otherwise considered a “non-employee director” for purposes of Rule 16b-3.

(kk) “**Non-Exempt Award**” means any Award that is subject to, and not exempt from, Section 409A, including as the result of (i) a deferral of the issuance of the shares subject to the Award which is elected by the Participant or imposed by the Company, or (ii) the terms of any Non-Exempt Severance Arrangement.

(ll) “**Non-Exempt Director Award**” means a Non-Exempt Award granted to a Participant who was a Director but not an Employee on the applicable grant date.

(mm) “**Non-Exempt Severance Arrangement**” means a severance arrangement or other agreement between the Participant and the Company that provides for acceleration of vesting of an Award and issuance of the shares in respect of such Award upon the Participant’s termination of employment or separation from service (as such term is defined in Section 409A(a)(2)(A)(i) of the Code (and without regard to any alternative definition thereunder)) (“**Separation from Service**”) and such severance benefit does not satisfy the requirements for an exemption from application of Section 409A provided under U.S. Treasury Regulations Section 1.409A-1(b)(4), 1.409A-1(b)(9) or otherwise.

(nn) “**Nonstatutory Stock Option**” means any option granted pursuant to Section 4 of the Plan that does not qualify as an Incentive Stock Option.

(oo) “**Officer**” means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

(pp) “**Option**” means an Incentive Stock Option or a Nonstatutory Stock Option to purchase shares of Common Stock granted pursuant to the Plan.

(qq) “**Option Agreement**” means a written or electronic agreement between the Company and the Optionholder evidencing the terms and conditions of the Option grant. The Option Agreement includes the Grant Notice for the Option and the agreement containing the written summary of the general terms and conditions applicable to the Option and which is provided, including through electronic means, to a Participant along with the Grant Notice. Each Option Agreement will be subject to the terms and conditions of the Plan.

(rr) “**Optionholder**” means a person to whom an Option is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Option.

(ss) “**Other Award**” means an award based in whole or in part by reference to the Common Stock which is granted pursuant to the terms and conditions of Section 5(c).

(tt) “**Other Award Agreement**” means a written or electronic agreement between the Company and a holder of an Other Award evidencing the terms and conditions of an Other Award grant. Each Other Award Agreement will be subject to the terms and conditions of the Plan.

(uu) “**Own,**” “**Owned,**” “**Owner,**” or “**Ownership**” means that a person or Entity will be deemed to “Own,” to have “Owned,” to be the “Owner” of, or to have acquired “Ownership” of securities if such person or Entity, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, has or shares voting power, which includes the power to vote or to direct the voting, with respect to such securities.

(vv) “**Participant**” means an Employee, Director or Consultant to whom an Award is granted pursuant to the Plan or, if applicable, such other person who holds an outstanding Award.

(ww) “**Performance Award**” means an Award that may vest or may be exercised or a cash award that may vest or become earned and paid contingent upon the attainment during a Performance Period of certain Performance Goals and which is granted under the terms and conditions of Section 5(b) pursuant to such terms as are approved by the Board. In addition, to the extent permitted by Applicable Law and set forth in the applicable Award Agreement, the Board may determine that cash or other property may be used in payment of Performance Awards. Performance Awards that are settled in cash or other property are not required to be valued in whole or in part by reference to, or otherwise based on, the Common Stock.

(xx) “**Performance Criteria**” means the one or more criteria that the Board will select for purposes of establishing the Performance Goals for a Performance Period. The Performance Criteria that will be used to establish such Performance Goals may be based on any one of, or combination of, the following as determined by the Board: earnings (including earnings per share and net earnings); earnings before interest, taxes and depreciation; earnings before interest, taxes, depreciation and amortization; total stockholder return; return on equity or average stockholder’s equity; return on assets, investment, or capital employed; stock price; margin (including gross margin); income (before or after taxes); operating income; operating income after taxes; pre-tax profit; operating cash flow; sales or revenue targets; increases in revenue or product revenue; expenses and cost reduction goals; improvement in or attainment of working capital levels; economic value added (or an equivalent metric); market share; cash flow; cash flow per share; share price performance; debt reduction; customer satisfaction; stockholders’ equity; capital expenditures; debt levels; operating profit or net operating profit; workforce diversity; growth of net income or operating income; billings; preclinical development related compound goals; financing; regulatory milestones, including approval of a compound; stockholder liquidity; corporate governance and compliance; product commercialization; intellectual property; personnel matters; progress of internal research or clinical programs; progress of partnered programs; partner satisfaction; budget management; clinical achievements; completing phases of a clinical trial (including the treatment phase); announcing or presenting preliminary or final data from clinical trials, in each case, whether on particular timelines or generally; timely completion of clinical trials; submission of INDs and NDAs and other regulatory achievements; partner or collaborator achievements; internal controls, including those related to the Sarbanes-Oxley Act of 2002; research progress, including the development of programs; investor relations, analysts and communication; manufacturing achievements (including obtaining particular yields from manufacturing runs and other measurable objectives related to process development activities); strategic partnerships or transactions (including in-licensing and out-licensing of intellectual property); establishing relationships with commercial entities with respect to the marketing, distribution and sale of the Company’s products (including with group purchasing organizations, distributors and other vendors); supply chain achievements (including establishing relationships with manufacturers or suppliers of active pharmaceutical ingredients and other component materials and manufacturers of the Company’s products); co-development, co-marketing, profit sharing, joint venture or other similar arrangements; individual performance goals; corporate development and planning goals; and other measures of performance selected by the Board or Committee.

(yy) “**Performance Goals**” means, for a Performance Period, the one or more goals established by the Board for the Performance Period based upon the Performance Criteria. Performance Goals may be based on a Company-wide basis, with respect to one or more business units, divisions, Affiliates, or business segments, and in either absolute terms or relative to the performance of one or more comparable companies or the performance of one or more relevant indices. Unless specified otherwise by the Board (i) in the Award Agreement at the time the Award is granted or (ii) in such other document setting forth the Performance Goals at the time the Performance Goals are established, the Board will appropriately make adjustments in the method of calculating the attainment of Performance Goals for a Performance Period as follows: (1) to exclude restructuring and/or other nonrecurring charges; (2) to exclude exchange rate effects; (3) to exclude the effects of changes to generally accepted accounting principles; (4) to exclude the effects of any statutory adjustments to corporate tax rates; (5) to exclude the effects of items that

are “unusual” in nature or occur “infrequently” as determined under generally accepted accounting principles; (6) to exclude the dilutive effects of acquisitions or joint ventures; (7) to assume that any business divested by the Company achieved performance objectives at targeted levels during the balance of a Performance Period following such divestiture; (8) to exclude the effect of any change in the outstanding shares of Common Stock by reason of any stock dividend or split, stock repurchase, reorganization, recapitalization, merger, consolidation, spin-off, combination or exchange of shares or other similar corporate change, or any distributions to common stockholders other than regular cash dividends; (9) to exclude the effects of stock based compensation and the award of bonuses under the Company’s bonus plans; (10) to exclude costs incurred in connection with potential acquisitions or divestitures that are required to be expensed under generally accepted accounting principles; and (11) to exclude the goodwill and intangible asset impairment charges that are required to be recorded under generally accepted accounting principles. In addition, the Board may establish or provide for other adjustment items in the Award Agreement at the time the Award is granted or in such other document setting forth the Performance Goals at the time the Performance Goals are established. In addition, the Board retains the discretion to reduce or eliminate the compensation or economic benefit due upon attainment of Performance Goals and to define the manner of calculating the Performance Criteria it selects to use for such Performance Period. Partial achievement of the specified criteria may result in the payment or vesting corresponding to the degree of achievement as specified in the Award Agreement or the written terms of a Performance Award.

(zz) “Performance Period” means the period of time selected by the Board over which the attainment of one or more Performance Goals will be measured for the purpose of determining a Participant’s right to vesting or exercise of an Award. Performance Periods may be of varying and overlapping duration, at the sole discretion of the Board.

(aaa) “Plan” means this Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan, as amended from time to time.

(bbb) “Plan Administrator” means the person, persons, and/or third-party administrator designated by the Company to administer the day-to-day operations of the Plan and the Company’s other equity incentive programs.

(ccc) “Post-Termination Exercise Period” means the period following termination of a Participant’s Continuous Service within which an Option or SAR is exercisable, as specified in Section (h).

(ddd) “Prior Plan” means the Artiva Biotherapeutics, Inc. Amended and Restated 2020 Equity Incentive Plan, as amended from time to time.

(eee) “Prospectus” means the document containing the Plan information specified in Section 10(a) of the Securities Act.

(fff) “**Restricted Stock Award**” means an Award of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(ggg) “**Restricted Stock Award Agreement**” means a written or electronic agreement between the Company and a holder of a Restricted Stock Award evidencing the terms and conditions of a Restricted Stock Award grant. The Restricted Stock Award Agreement includes the Grant Notice for the Restricted Stock Award and the agreement containing the written summary of the general terms and conditions applicable to the Restricted Stock Award and which is provided, including by electronic means, to a Participant along with the Grant Notice. Each Restricted Stock Award Agreement will be subject to the terms and conditions of the Plan.

(hhh) “**Returning Shares**” means shares subject to outstanding stock awards granted under the Prior Plan and that following the Effective Date: (A) are not issued because such stock award or any portion thereof expires or otherwise terminates without all of the shares covered by such stock award having been issued; (B) are not issued because such stock award or any portion thereof is settled in cash; (C) are forfeited back to or repurchased by the Company because of the failure to meet a contingency or condition required for the vesting of such shares; (D) are withheld or reacquired to satisfy the exercise, strike or purchase price; or (E) are withheld or reacquired to satisfy a tax withholding obligation.

(iii) “**RSU Award**” or “**RSU**” means an Award of restricted stock units representing the right to receive an issuance of shares of Common Stock which is granted pursuant to the terms and conditions of Section 5(a).

(jjj) “**RSU Award Agreement**” means a written or electronic agreement between the Company and a holder of an RSU Award evidencing the terms and conditions of an RSU Award grant. The RSU Award Agreement includes the Grant Notice for the RSU Award and the agreement containing the written summary of the general terms and conditions applicable to the RSU Award and which is provided, including by electronic means, to a Participant along with the Grant Notice. Each RSU Award Agreement will be subject to the terms and conditions of the Plan.

(kkk) “**Rule 16b-3**” means Rule 16b-3 promulgated under the Exchange Act or any successor to Rule 16b-3, as in effect from time to time.

(lll) “**Rule 405**” means Rule 405 promulgated under the Securities Act.

(mmm) “**Section 409A**” means Section 409A of the Code and the regulations and other guidance thereunder.

(nnn) “**Section 409A Change in Control**” means a change in the ownership or effective control of the Company, or in the ownership of a substantial portion of the Company’s assets, as provided in Section 409A(a)(2)(A)(v) of the Code and U.S. Treasury Regulations Section 1.409A-3(i)(5) (without regard to any alternative definition thereunder).

(ooo) “**Securities Act**” means the U.S. Securities Act of 1933, as amended.

(ppp) “**Share Reserve**” means the number of shares available for issuance under the Plan as set forth in Section 3(a).

(qqq) “**Stock Appreciation Right**” or “**SAR**” means a right to receive the appreciation on Common Stock that is granted pursuant to the terms and conditions of Section 4.

(rrr) “**SAR Agreement**” means a written agreement between the Company and a holder of a SAR evidencing the terms and conditions of a SAR grant. The SAR Agreement includes the Grant Notice for the SAR and the agreement containing the written summary of the general terms and conditions applicable to the SAR and which is provided to a Participant along with the Grant Notice. Each SAR Agreement will be subject to the terms and conditions of the Plan

(sss) “**Subsidiary**” means, with respect to the Company, (i) any corporation of which more than 50% of the outstanding capital stock having ordinary voting power to elect a majority of the board of directors of such corporation (irrespective of whether, at the time, stock of any other class or classes of such corporation will have or might have voting power by reason of the happening of any contingency) is at the time, directly or indirectly, Owned by the Company, and (ii) any partnership, limited liability company or other entity in which the Company has a direct or indirect interest (whether in the form of voting or participation in profits or capital contribution) of more than 50%.

(ttt) “**Tax-Related Items**” means any income tax, social insurance, payroll tax, fringe benefit tax, payment on account or other tax-related items arising out of or in relation to a Participant’s participation in the Plan and legally applicable or deemed applicable to the Participant.

(uuu) “**Ten Percent Stockholder**” means a person who Owns (or is deemed to Own pursuant to Section 424(d) of the Code) stock possessing more than 10% of the total combined voting power of all classes of stock of the Company or any Affiliate.

(vvv) “**Trading Policy**” means the Company’s policy permitting certain individuals to sell Company shares only during certain “window” periods and/or otherwise restricts the ability of certain individuals to transfer or encumber Company shares, as in effect from time to time.

(www) “**Unvested Non-Exempt Award**” means the portion of any Non-Exempt Award that had not vested in accordance with its terms upon or prior to the date of any Corporate Transaction.

(xxx) “**Vested Non-Exempt Award**” means the portion of any Non-Exempt Award that had vested in accordance with its terms upon or prior to the date of a Corporate Transaction.

**ARTIVA BIOTHERAPEUTICS, INC.
STOCK OPTION GRANT NOTICE
(2024 EQUITY INCENTIVE PLAN)**

Artiva Biotherapeutics, Inc. (the “*Company*”), pursuant to the Company’s 2024 Equity Incentive Plan (the “*Plan*”), has granted to you (“*Optionholder*”) an option to purchase the number of shares of the Common Stock set forth below (the “*Option*”). Your Option is subject to all of the terms and conditions as set forth herein and in the Plan, and the Stock Option Agreement and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Stock Option Agreement shall have the meanings set forth in the Plan or the Stock Option Agreement, as applicable.

Optionholder:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares Subject to Option:	_____
Exercise Price Per Share:	_____
Total Exercise Price:	_____
Expiration Date:	_____

Type of Grant: [Incentive Stock Option] OR [Nonstatutory Stock Option]

Exercise and Vesting Schedule: Subject to the Optionholder’s Continuous Service through each applicable vesting date, the Option will vest as follows, [25% of the shares initially subject to the Option will vest and become exercisable on the first anniversary of the Vesting Commencement Date, and the balance of the shares subject to the Option shall vest and become exercisable at a rate of 1/36th per month over the following 36 months].

Optionholder Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The Option is governed by this Stock Option Grant Notice (this “*Grant Notice*”), and the provisions of the Plan and the Stock Option Agreement and the Notice of Exercise, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Stock Option Agreement (together, the “*Option Agreement*”) may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- If the Option is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options granted to you) cannot be first *exercisable* for more than \$100,000 in value (measured by exercise price) in any calendar year. Any excess over \$100,000 is a Nonstatutory Stock Option.

- You consent to receive this Grant Notice, the Stock Option Agreement, the Plan, the Prospectus and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
- You have read and are familiar with the provisions of the Plan, the Stock Option Agreement, the Notice of Exercise and the Prospectus. In the event of any conflict between the provisions in this Grant Notice, the Option Agreement, the Notice of Exercise, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.
- The Option Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of other equity awards previously granted to you and any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this Option.
- Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

ARTIVA BIOTHERAPEUTICS, INC.**OPTIONHOLDER:**

By: _____
Signature

Title: _____

Date: _____

Signature

Date: _____

ATTACHMENTS: Stock Option Agreement, 2024 Equity Incentive Plan, Notice of Exercise, Prospectus

ATTACHMENT I

**ARTIVA BIOTHERAPEUTICS, INC.
STOCK OPTION AGREEMENT
(2024 EQUITY INCENTIVE PLAN)**

As reflected by your Stock Option Grant Notice (“**Grant Notice**”), Artiva Biotherapeutics, Inc. (the “**Company**”) has granted you an option under the Company’s 2024 Equity Incentive Plan (the “**Plan**”) to purchase a number of shares of Common Stock at the exercise price indicated in your Grant Notice (the “**Option**”). Capitalized terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the meanings set forth in the Grant Notice or Plan, as applicable. The terms of your Option as specified in the Grant Notice and this Stock Option Agreement constitute your Option Agreement.

The general terms and conditions applicable to your Option are as follows:

1. GOVERNING PLAN DOCUMENT. Your Option is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your Option;

(b) Section 9(e) regarding the Company’s retained rights to terminate your Continuous Service notwithstanding the grant of the Option;

and

(c) Section 8 regarding the tax consequences of your Option.

Your Option is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the Option Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. VESTING. Your option will vest as provided in your Grant Notice, subject to the provisions contained herein and the terms of the Plan. Vesting will cease upon termination upon your Continuous Service.

3. EXERCISE.

(a) You may generally exercise the vested portion of your Option for whole shares of Common Stock at any time during its term by delivery of payment of the exercise price and applicable withholding taxes and other required documentation to the Plan Administrator in accordance with the exercise procedures established by the Plan Administrator, which may include an electronic submission. Please review Sections 4(i), 4(j) and 7(b)(v) of the Plan, which may restrict or prohibit your ability to exercise your Option during certain periods.

(b) To the extent permitted by Applicable Law, you may pay your Option exercise price as follows:

(i) cash, check, bank draft or money order;

(ii) subject to Company and/or Committee consent at the time of exercise, pursuant to a “cashless exercise” program as further described in Section 4(c)(ii) of the Plan if at the time of exercise the Common Stock is publicly traded;

(iii) subject to Company and/or Committee consent at the time of exercise, by delivery of previously owned shares of Common Stock as further described in Section 4(c)(iii) of the Plan;

(iv) subject to Company and/or Committee consent at the time of exercise, if the Option is a Nonstatutory Stock Option, by a “net exercise” arrangement as further described in Section 4(c)(iv) of the Plan; or

(v) subject to Company and/or Committee consent at the time of exercise, in any form of consideration that may be acceptable to the Board and permissible under Applicable law as further described in Section 4(c)(v) of the Plan

(c) By accepting your Option, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2241 or any successor or similar rules or regulation (the “**Lock-Up Period**”); *provided, however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 3(c). The underwriters of the Company’s stock are intended third party beneficiaries of this Section 3(c) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

4. TERM. You may not exercise your Option before the commencement of its term or after its term expires. The term of your Option commences on the Date of Grant and expires upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, Disability or death;

- (c) 12 months after the termination of your Continuous Service due to your Disability;
- (d) 18 months after your death if you die during your Continuous Service;
- (e) immediately upon a Corporate Transaction if the Board has determined that the Option will terminate in connection with a Corporate Transaction,
- (f) the Expiration Date indicated in your Grant Notice; or
- (g) the day before the 10th anniversary of the Date of Grant.

Notwithstanding the foregoing, if you die during the period provided in Section 4(b) or 4(c) above, the term of your Option shall not expire until the earlier of (i) 18 months after your death, (ii) upon any termination of the Option in connection with a Corporate Transaction, (iii) the Expiration Date indicated in your Grant Notice, or (iv) the day before the tenth anniversary of the Date of Grant. Additionally, the Post-Termination Exercise Period of your Option may be extended as provided in Section 4(i) of the Plan.

To obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the date of grant of your Option and ending on the day three months before the date of your Option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. If the Company provides for the extended exercisability of your Option under certain circumstances for your benefit, your Option will not necessarily be treated as an Incentive Stock Option if you exercise your Option more than three months after the date your employment terminates.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan: (a) you may not exercise your Option unless the applicable tax withholding obligations are satisfied, and (b) at the time you exercise your Option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with the exercise of your Option in accordance with the withholding procedures established by the Company. Accordingly, you may not be able to exercise your Option even though the Option is vested, and the Company shall have no obligation to issue shares of Common Stock subject to your Option, unless and until such obligations are satisfied. In the event that the amount of the Company's withholding obligation in connection with your Option was greater than the amount actually withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. INCENTIVE STOCK OPTION DISPOSITION REQUIREMENT. If your Option is an Incentive Stock Option, you must notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your Option that occurs within two years after the date of your Option grant or within one year after such shares of Common Stock are transferred upon exercise of your Option.

7. TRANSFERABILITY. Except as otherwise provided in Section 4(e) of the Plan, your Option is not transferable, except by will or by the applicable laws of descent and distribution, and is exercisable during your life only by you.

8. CORPORATE TRANSACTION. Your Option is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

9. NO LIABILITY FOR TAXES. As a condition to accepting the Option, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the Option or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the Option and have either done so or knowingly and voluntarily declined to do so. Additionally, you acknowledge that the Option is exempt from Section 409A only if the exercise price is at least equal to the “fair market value” of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Option. Additionally, as a condition to accepting the Option, you agree not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise is less than the “fair market value” of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

10. NO ADVICE REGARDING GRANT. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying shares of Common Stock. You should consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

11. CHOICE OF LAW. Your Option and any controversy arising out of or relating to your Option shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

12. SEVERABILITY. If any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. IMPOSITION OF OTHER REQUIREMENTS. The Company reserves the right to impose other requirements on your participation in the Plan, on your Option and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

14. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

15. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your Option, including a summary of the applicable federal income tax consequences please see the Prospectus.

* * * *

ATTACHMENT II

2024 EQUITY INCENTIVE PLAN

ATTACHMENT III

**ARTIVA BIOTHERAPEUTICS, INC.
NOTICE OF EXERCISE
(2024 EQUITY INCENTIVE PLAN)**

ARTIVA BIOTHERAPEUTICS, INC.
5505 MOREHOUSE DRIVE, SUITE 100
SAN DIEGO, CALIFORNIA 92121

Date of Exercise: _____

This constitutes notice to Artiva Biotherapeutics, Inc. (the “*Company*”) that I elect to purchase the below number of shares of Common Stock of the Company (the “*Shares*”) by exercising my Option for the price set forth below. Capitalized terms not explicitly defined in this Notice of Exercise but defined in the Stock Option Grant Notice, Stock Option Agreement or 2024 Equity Incentive Plan (the “*Plan*”) shall have the meanings set forth in the Stock Option Grant Notice, Stock Option Agreement or Plan, as applicable. Use of certain payment methods is subject to Company and/or Committee consent and certain additional requirements set forth in the Stock Option Agreement and the Plan.

Type of option (check one):	Incentive ☐	Nonstatutory ☐
Date of Grant:	_____	
Number of Shares as to which Option is exercised:	_____	
Certificates to be issued in name of:	_____	
Total exercise price:	\$ _____	
Cash, check, bank draft or money order delivered herewith:	\$ _____	
Value of _____ Shares delivered herewith:	\$ _____	
Regulation T Program (cashless exercise)	\$ _____	
Value of _____ Shares pursuant to net exercise:	\$ _____	

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Plan, (ii) to satisfy the tax withholding obligations, if any, relating to the exercise of this Option as set forth in the Stock Option Agreement, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within 15 days after the date of any disposition of any of the Shares issued upon exercise of this Option that occurs within two years after the Date of Grant or within one year after such Shares are issued upon exercise of this Option.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act (or such longer period as the underwriters or the Company shall request to facilitate compliance with FINRA Rule 2241 or any successor or similar rule or regulation) (the “**Lock-Up Period**”). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. To enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

**ARTIVA BIOTHERAPEUTICS, INC.
STOCK OPTION GRANT NOTICE
(2024 EQUITY INCENTIVE PLAN)**

Artiva Biotherapeutics, Inc. (the “**Company**”), pursuant to the Company’s 2024 Equity Incentive Plan (the “**Plan**”), has granted to you (“**Optionholder**”) an option to purchase the number of shares of the Common Stock set forth below (the “**Option**”). Your Option is subject to all of the terms and conditions as set forth herein and in the Plan, and the Stock Option Agreement and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Stock Option Agreement shall have the meanings set forth in the Plan or the Stock Option Agreement, as applicable.

Optionholder:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares Subject to Option:	_____
Exercise Price Per Share:	_____
Total Exercise Price:	_____
Expiration Date:	_____

Type of Grant: Nonstatutory Stock Option

Exercise and Vesting Schedule: [Initial Grant] Subject to the Optionholder’s Continuous Service through each applicable vesting date, the shares subject to the Option shall vest and become exercisable in a series of 36 successive substantially equal monthly installments following the Vesting Commencement Date.

[Annual Grant] Subject to the Optionholder’s Continuous Service through the applicable vesting date, the Option shall vest and become exercisable in full on the earlier of the date that is 12 months following the Date of Grant or the date of the Company’s next annual stockholder meeting following the Date of Grant.

Notwithstanding anything in this Agreement to the contrary, if a Change in Control occurs prior to the termination of the Optionholder’s Continuous Service, then, as of the effective time of such Change in Control, the vesting of the Option shall be accelerated in full, such that 100% of the total number of shares subject to the Option shall become immediately vested and exercisable.

Optionholder Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The Option is governed by this Stock Option Grant Notice (this “**Grant Notice**”), and the provisions of the Plan and the Stock Option Agreement and the Notice of Exercise, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Stock Option Agreement (together, the “**Option Agreement**”) may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- If the Option is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options granted to you) cannot be first *exercisable* for more than \$100,000 in value (measured by exercise price) in any calendar year. Any excess over \$100,000 is a Nonstatutory Stock Option.
- You consent to receive this Grant Notice, the Stock Option Agreement, the Plan, the Prospectus and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
- You have read and are familiar with the provisions of the Plan, the Stock Option Agreement, the Notice of Exercise and the Prospectus. In the event of any conflict between the provisions in this Grant Notice, the Option Agreement, the Notice of Exercise, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.
- The Option Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of other equity awards previously granted to you and any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this Option.
- Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

ARTIVA BIOTHERAPEUTICS, INC.

OPTIONHOLDER:

By: _____
Signature
Title: _____
Date: _____

Signature
Date: _____

ATTACHMENTS: Stock Option Agreement, 2024 Equity Incentive Plan, Notice of Exercise, Prospectus

ATTACHMENT I

**ARTIVA BIOTHERAPEUTICS, INC.
STOCK OPTION AGREEMENT
(2024 EQUITY INCENTIVE PLAN)**

As reflected by your Stock Option Grant Notice (“**Grant Notice**”), Artiva Biotherapeutics, Inc. (the “**Company**”) has granted you an option under the Company’s 2024 Equity Incentive Plan (the “**Plan**”) to purchase a number of shares of Common Stock at the exercise price indicated in your Grant Notice (the “**Option**”). Capitalized terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the meanings set forth in the Grant Notice or Plan, as applicable. The terms of your Option as specified in the Grant Notice and this Stock Option Agreement constitute your Option Agreement.

The general terms and conditions applicable to your Option are as follows:

1. GOVERNING PLAN DOCUMENT. Your Option is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your Option;

(b) Section 9(e) regarding the Company’s retained rights to terminate your Continuous Service notwithstanding the grant of the Option;

and

(c) Section 8 regarding the tax consequences of your Option.

Your Option is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the Option Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. VESTING. Your option will vest as provided in your Grant Notice, subject to the provisions contained herein and the terms of the Plan. Vesting will cease upon termination upon your Continuous Service.

3. EXERCISE.

(a) You may generally exercise the vested portion of your Option for whole shares of Common Stock at any time during its term by delivery of payment of the exercise price and applicable withholding taxes and other required documentation to the Plan Administrator in accordance with the exercise procedures established by the Plan Administrator, which may include an electronic submission. Please review Sections 4(i), 4(j) and 7(b)(v) of the Plan, which may restrict or prohibit your ability to exercise your Option during certain periods.

(b) To the extent permitted by Applicable Law, you may pay your Option exercise price as follows:

(i) cash, check, bank draft or money order;

(ii) subject to Company and/or Committee consent at the time of exercise, pursuant to a “cashless exercise” program as further described in Section 4(c)(ii) of the Plan if at the time of exercise the Common Stock is publicly traded;

(iii) subject to Company and/or Committee consent at the time of exercise, by delivery of previously owned shares of Common Stock as further described in Section 4(c)(iii) of the Plan;

(iv) subject to Company and/or Committee consent at the time of exercise, if the Option is a Nonstatutory Stock Option, by a “net exercise” arrangement as further described in Section 4(c)(iv) of the Plan; or

(v) subject to Company and/or Committee consent at the time of exercise, in any form of consideration that may be acceptable to the Board and permissible under Applicable law as further described in Section 4(c)(v) of the Plan

(c) By accepting your Option, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2241 or any successor or similar rules or regulation (the “**Lock-Up Period**”); *provided, however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 3(c). The underwriters of the Company’s stock are intended third party beneficiaries of this Section 3(c) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

4. TERM. You may not exercise your Option before the commencement of its term or after its term expires. The term of your Option commences on the Date of Grant and expires upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, Disability or death;

- (c) 12 months after the termination of your Continuous Service due to your Disability;
- (d) 18 months after your death if you die during your Continuous Service;
- (e) immediately upon a Corporate Transaction if the Board has determined that the Option will terminate in connection with a Corporate Transaction,
- (f) the Expiration Date indicated in your Grant Notice; or
- (g) the day before the 10th anniversary of the Date of Grant.

Notwithstanding the foregoing, if you die during the period provided in Section 4(b) or 4(c) above, the term of your Option shall not expire until the earlier of (i) 18 months after your death, (ii) upon any termination of the Option in connection with a Corporate Transaction, (iii) the Expiration Date indicated in your Grant Notice, or (iv) the day before the tenth anniversary of the Date of Grant. Additionally, the Post-Termination Exercise Period of your Option may be extended as provided in Section 4(i) of the Plan.

To obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the date of grant of your Option and ending on the day three months before the date of your Option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. If the Company provides for the extended exercisability of your Option under certain circumstances for your benefit, your Option will not necessarily be treated as an Incentive Stock Option if you exercise your Option more than three months after the date your employment terminates.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan: (a) you may not exercise your Option unless the applicable tax withholding obligations are satisfied, and (b) at the time you exercise your Option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with the exercise of your Option in accordance with the withholding procedures established by the Company. Accordingly, you may not be able to exercise your Option even though the Option is vested, and the Company shall have no obligation to issue shares of Common Stock subject to your Option, unless and until such obligations are satisfied. In the event that the amount of the Company's withholding obligation in connection with your Option was greater than the amount actually withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. INCENTIVE STOCK OPTION DISPOSITION REQUIREMENT. If your Option is an Incentive Stock Option, you must notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your Option that occurs within two years after the date of your Option grant or within one year after such shares of Common Stock are transferred upon exercise of your Option.

7. TRANSFERABILITY. Except as otherwise provided in Section 4(e) of the Plan, your Option is not transferable, except by will or by the applicable laws of descent and distribution, and is exercisable during your life only by you.

8. CORPORATE TRANSACTION. Your Option is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

9. NO LIABILITY FOR TAXES. As a condition to accepting the Option, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the Option or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the Option and have either done so or knowingly and voluntarily declined to do so. Additionally, you acknowledge that the Option is exempt from Section 409A only if the exercise price is at least equal to the “fair market value” of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Option. Additionally, as a condition to accepting the Option, you agree not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise is less than the “fair market value” of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

10. NO ADVICE REGARDING GRANT. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying shares of Common Stock. You should consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

11. CHOICE OF LAW. Your Option and any controversy arising out of or relating to your Option shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

12. SEVERABILITY. If any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. IMPOSITION OF OTHER REQUIREMENTS. The Company reserves the right to impose other requirements on your participation in the Plan, on your Option and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

14. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

15. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your Option, including a summary of the applicable federal income tax consequences please see the Prospectus.

* * * *

ATTACHMENT II

2024 EQUITY INCENTIVE PLAN

ATTACHMENT III

ARTIVA BIOTHERAPEUTICS, INC.
NOTICE OF EXERCISE
(2024 EQUITY INCENTIVE PLAN)ARTIVA BIOTHERAPEUTICS, INC.
5505 MOREHOUSE DRIVE, SUITE 100
SAN DIEGO, CALIFORNIA 92121

Date of Exercise: _____

This constitutes notice to Artiva Biotherapeutics, Inc. (the “**Company**”) that I elect to purchase the below number of shares of Common Stock of the Company (the “**Shares**”) by exercising my Option for the price set forth below. Capitalized terms not explicitly defined in this Notice of Exercise but defined in the Stock Option Grant Notice, Stock Option Agreement or 2024 Equity Incentive Plan (the “**Plan**”) shall have the meanings set forth in the Stock Option Grant Notice, Stock Option Agreement or Plan, as applicable. Use of certain payment methods is subject to Company and/or Committee consent and certain additional requirements set forth in the Stock Option Agreement and the Plan.

Type of option (check one):	Incentive ☐	Nonstatutory ☐
Date of Grant:	_____	
Number of Shares as to which Option is exercised:	_____	
Certificates to be issued in name of:	_____	
Total exercise price:	\$ _____	
Cash, check, bank draft or money order delivered herewith:	\$ _____	
Value of _____ Shares delivered herewith:	\$ _____	
Regulation T Program (cashless exercise)	\$ _____	
Value of _____ Shares pursuant to net exercise:	\$ _____	

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Plan, (ii) to satisfy the tax withholding obligations, if any, relating to the exercise of this Option as set forth in the Stock Option Agreement, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within 15 days after the date of any disposition of any of the Shares issued upon exercise of this Option that occurs within two years after the Date of Grant or within one year after such Shares are issued upon exercise of this Option.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act (or such longer period as the underwriters or the Company shall request to facilitate compliance with FINRA Rule 2241 or any successor or similar rule or regulation) (the “**Lock-Up Period**”). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. To enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

ARTIVA BIOTHERAPEUTICS, INC.
STOCK OPTION GRANT NOTICE
(2024 EQUITY INCENTIVE PLAN)

Artiva Biotherapeutics, Inc. (the “*Company*”), pursuant to the Company’s 2024 Equity Incentive Plan (the “*Plan*”), has granted to you (“*Optionholder*”) an option to purchase the number of shares of the Common Stock set forth below (the “*Option*”). Your Option is subject to all of the terms and conditions as set forth herein and in the Plan, and the Stock Option Agreement and the Notice of Exercise, all of which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Stock Option Agreement shall have the meanings set forth in the Plan or the Stock Option Agreement, as applicable.

Optionholder:	_____
Date of Grant:	_____
Vesting Commencement Date:	_____
Number of Shares Subject to Option:	_____
Exercise Price Per Share:	_____
Total Exercise Price:	_____
Expiration Date:	_____

Type of Grant: [Incentive Stock Option] OR [Nonstatutory Stock Option]

Exercise and Vesting Schedule: Subject to the Optionholder’s Continuous Service through each applicable vesting date, the Option will vest as follows, [25% of the shares initially subject to the Option will vest and become exercisable on the first anniversary of the Vesting Commencement Date, and the balance of the shares subject to the Option shall vest and become exercisable at a rate of 1/36th per month over the following 36 months].

Notwithstanding anything in this Agreement to the contrary, if a Change in Control occurs and upon or within three months prior to, or 12 months after, the effective time of such Change in Control, the Optionholder’s Continuous Service terminates due to an involuntary termination (not including death or Disability) without Cause or due to the Optionholder’s voluntary resignation for Good Reason, then, as of the date of termination of the Optionholder’s Continuous Service or the effective time of such Change in Control (whichever occurs later), the vesting and exercisability of the Option shall be accelerated in full, such that 100% of the total number of shares subject to the Option shall become immediately vested and exercisable.

Optionholder Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The Option is governed by this Stock Option Grant Notice (this “**Grant Notice**”), and the provisions of the Plan and the Stock Option Agreement and the Notice of Exercise, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Stock Option Agreement (together, the “**Option Agreement**”) may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- If the Option is an Incentive Stock Option, it (plus other outstanding Incentive Stock Options granted to you) cannot be first *exercisable* for more than \$100,000 in value (measured by exercise price) in any calendar year. Any excess over \$100,000 is a Nonstatutory Stock Option.
- You consent to receive this Grant Notice, the Stock Option Agreement, the Plan, the Prospectus and any other Plan-related documents by electronic delivery and to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company.
- You have read and are familiar with the provisions of the Plan, the Stock Option Agreement, the Notice of Exercise and the Prospectus. In the event of any conflict between the provisions in this Grant Notice, the Option Agreement, the Notice of Exercise, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.
- The Option Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of other equity awards previously granted to you and any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this Option.
- Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

ARTIVA BIOTHERAPEUTICS, INC.

OPTIONHOLDER:

By: _____
Signature
Title: _____
Date: _____

Signature
Date: _____

ATTACHMENTS: Stock Option Agreement, 2024 Equity Incentive Plan, Notice of Exercise, Prospectus

ATTACHMENT I

**ARTIVA BIOTHERAPEUTICS, INC.
STOCK OPTION AGREEMENT
(2024 EQUITY INCENTIVE PLAN)**

As reflected by your Stock Option Grant Notice (“**Grant Notice**”), Artiva Biotherapeutics, Inc. (the “**Company**”) has granted you an option under the Company’s 2024 Equity Incentive Plan (the “**Plan**”) to purchase a number of shares of Common Stock at the exercise price indicated in your Grant Notice (the “**Option**”). Capitalized terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the meanings set forth in the Grant Notice or Plan, as applicable. The terms of your Option as specified in the Grant Notice and this Stock Option Agreement constitute your Option Agreement.

The general terms and conditions applicable to your Option are as follows:

1. GOVERNING PLAN DOCUMENT. Your Option is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your Option;

(b) Section 9(e) regarding the Company’s retained rights to terminate your Continuous Service notwithstanding the grant of the Option;

and

(c) Section 8 regarding the tax consequences of your Option.

Your Option is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the Option Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. VESTING. Your option will vest as provided in your Grant Notice, subject to the provisions contained herein and the terms of the Plan. Vesting will cease upon termination upon your Continuous Service.

3. EXERCISE.

(a) You may generally exercise the vested portion of your Option for whole shares of Common Stock at any time during its term by delivery of payment of the exercise price and applicable withholding taxes and other required documentation to the Plan Administrator in accordance with the exercise procedures established by the Plan Administrator, which may include an electronic submission. Please review Sections 4(i), 4(j) and 7(b)(v) of the Plan, which may restrict or prohibit your ability to exercise your Option during certain periods.

(b) To the extent permitted by Applicable Law, you may pay your Option exercise price as follows:

(i) cash, check, bank draft or money order;

(ii) subject to Company and/or Committee consent at the time of exercise, pursuant to a “cashless exercise” program as further described in Section 4(c)(ii) of the Plan if at the time of exercise the Common Stock is publicly traded;

(iii) subject to Company and/or Committee consent at the time of exercise, by delivery of previously owned shares of Common Stock as further described in Section 4(c)(iii) of the Plan;

(iv) subject to Company and/or Committee consent at the time of exercise, if the Option is a Nonstatutory Stock Option, by a “net exercise” arrangement as further described in Section 4(c)(iv) of the Plan; or

(v) subject to Company and/or Committee consent at the time of exercise, in any form of consideration that may be acceptable to the Board and permissible under Applicable law as further described in Section 4(c)(v) of the Plan

(c) By accepting your Option, you agree that you will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company held by you, for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act or such longer period as the underwriters or the Company will request to facilitate compliance with FINRA Rule 2241 or any successor or similar rules or regulation (the “**Lock-Up Period**”); *provided, however*, that nothing contained in this section will prevent the exercise of a repurchase option, if any, in favor of the Company during the Lock-Up Period. You further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. In order to enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to your shares of Common Stock until the end of such period. You also agree that any transferee of any shares of Common Stock (or other securities) of the Company held by you will be bound by this Section 3(c). The underwriters of the Company’s stock are intended third party beneficiaries of this Section 3(c) and will have the right, power and authority to enforce the provisions hereof as though they were a party hereto.

4. TERM. You may not exercise your Option before the commencement of its term or after its term expires. The term of your Option commences on the Date of Grant and expires upon the earliest of the following:

(a) immediately upon the termination of your Continuous Service for Cause;

(b) three months after the termination of your Continuous Service for any reason other than Cause, Disability or death;

- (c) 12 months after the termination of your Continuous Service due to your Disability;
- (d) 18 months after your death if you die during your Continuous Service;
- (e) immediately upon a Corporate Transaction if the Board has determined that the Option will terminate in connection with a Corporate Transaction,
- (f) the Expiration Date indicated in your Grant Notice; or
- (g) the day before the 10th anniversary of the Date of Grant.

Notwithstanding the foregoing, if you die during the period provided in Section 4(b) or 4(c) above, the term of your Option shall not expire until the earlier of (i) 18 months after your death, (ii) upon any termination of the Option in connection with a Corporate Transaction, (iii) the Expiration Date indicated in your Grant Notice, or (iv) the day before the tenth anniversary of the Date of Grant. Additionally, the Post-Termination Exercise Period of your Option may be extended as provided in Section 4(i) of the Plan.

To obtain the federal income tax advantages associated with an Incentive Stock Option, the Code requires that at all times beginning on the date of grant of your Option and ending on the day three months before the date of your Option's exercise, you must be an employee of the Company or an Affiliate, except in the event of your death or Disability. If the Company provides for the extended exercisability of your Option under certain circumstances for your benefit, your Option will not necessarily be treated as an Incentive Stock Option if you exercise your Option more than three months after the date your employment terminates.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan: (a) you may not exercise your Option unless the applicable tax withholding obligations are satisfied, and (b) at the time you exercise your Option, in whole or in part, or at any time thereafter as requested by the Company, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for (including by means of a "cashless exercise" pursuant to a program developed under Regulation T as promulgated by the Federal Reserve Board to the extent permitted by the Company), any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with the exercise of your Option in accordance with the withholding procedures established by the Company. Accordingly, you may not be able to exercise your Option even though the Option is vested, and the Company shall have no obligation to issue shares of Common Stock subject to your Option, unless and until such obligations are satisfied. In the event that the amount of the Company's withholding obligation in connection with your Option was greater than the amount actually withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. INCENTIVE STOCK OPTION DISPOSITION REQUIREMENT. If your Option is an Incentive Stock Option, you must notify the Company in writing within 15 days after the date of any disposition of any of the shares of the Common Stock issued upon exercise of your Option that occurs within two years after the date of your Option grant or within one year after such shares of Common Stock are transferred upon exercise of your Option.

7. TRANSFERABILITY. Except as otherwise provided in Section 4(e) of the Plan, your Option is not transferable, except by will or by the applicable laws of descent and distribution, and is exercisable during your life only by you.

8. CORPORATE TRANSACTION. Your Option is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

9. NO LIABILITY FOR TAXES. As a condition to accepting the Option, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the Option or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the Option and have either done so or knowingly and voluntarily declined to do so. Additionally, you acknowledge that the Option is exempt from Section 409A only if the exercise price is at least equal to the “fair market value” of the Common Stock on the date of grant as determined by the Internal Revenue Service and there is no other impermissible deferral of compensation associated with the Option. Additionally, as a condition to accepting the Option, you agree not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates in the event that the Internal Revenue Service asserts that such exercise is less than the “fair market value” of the Common Stock on the date of grant as subsequently determined by the Internal Revenue Service.

10. NO ADVICE REGARDING GRANT. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying shares of Common Stock. You should consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

11. CHOICE OF LAW. Your Option and any controversy arising out of or relating to your Option shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

12. SEVERABILITY. If any part of this Option Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Option Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Option Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. IMPOSITION OF OTHER REQUIREMENTS. The Company reserves the right to impose other requirements on your participation in the Plan, on your Option and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

14. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

15. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your Option, including a summary of the applicable federal income tax consequences please see the Prospectus.

* * * *

ATTACHMENT II
2024 EQUITY INCENTIVE PLAN

ATTACHMENT III

ARTIVA BIOTHERAPEUTICS, INC.
NOTICE OF EXERCISE
(2024 EQUITY INCENTIVE PLAN)ARTIVA BIOTHERAPEUTICS, INC.
5505 MOREHOUSE DRIVE, SUITE 100
SAN DIEGO, CALIFORNIA 92121

Date of Exercise: _____

This constitutes notice to Artiva Biotherapeutics, Inc. (the “**Company**”) that I elect to purchase the below number of shares of Common Stock of the Company (the “**Shares**”) by exercising my Option for the price set forth below. Capitalized terms not explicitly defined in this Notice of Exercise but defined in the Stock Option Grant Notice, Stock Option Agreement or 2024 Equity Incentive Plan (the “**Plan**”) shall have the meanings set forth in the Stock Option Grant Notice, Stock Option Agreement or Plan, as applicable. Use of certain payment methods is subject to Company and/or Committee consent and certain additional requirements set forth in the Stock Option Agreement and the Plan.

Type of option (check one):	Incentive ☐	Nonstatutory ☐
Date of Grant:	_____	
Number of Shares as to which Option is exercised:	_____	
Certificates to be issued in name of:	_____	
Total exercise price:	\$ _____	
Cash, check, bank draft or money order delivered herewith:	\$ _____	
Value of _____ Shares delivered herewith:	\$ _____	
Regulation T Program (cashless exercise)	\$ _____	
Value of _____ Shares pursuant to net exercise:	\$ _____	

By this exercise, I agree (i) to provide such additional documents as you may require pursuant to the terms of the Plan, (ii) to satisfy the tax withholding obligations, if any, relating to the exercise of this Option as set forth in the Stock Option Agreement, and (iii) if this exercise relates to an incentive stock option, to notify you in writing within 15 days after the date of any disposition of any of the Shares issued upon exercise of this Option that occurs within two years after the Date of Grant or within one year after such Shares are issued upon exercise of this Option.

I further agree that, if required by the Company (or a representative of the underwriters) in connection with the first underwritten registration of the offering of any securities of the Company under the Securities Act, I will not sell, dispose of, transfer, make any short sale of, grant any option for the purchase of, or enter into any hedging or similar transaction with the same economic effect as a sale with respect to any shares of Common Stock or other securities of the Company for a period of one hundred eighty (180) days following the effective date of a registration statement of the Company filed under the Securities Act (or such longer period as the underwriters or the Company shall request to facilitate compliance with FINRA Rule 2241 or any successor or similar rule or regulation) (the “**Lock-Up Period**”). I further agree to execute and deliver such other agreements as may be reasonably requested by the Company or the underwriters that are consistent with the foregoing or that are necessary to give further effect thereto. To enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of such period.

Very truly yours,

**ARTIVA BIOTHERAPEUTICS, INC.
RSU AWARD GRANT NOTICE
(2024 EQUITY INCENTIVE PLAN)**

Artiva Biotherapeutics, Inc. (the “*Company*”) has awarded to you (the “*Participant*”) the number of restricted stock units specified and on the terms set forth below in consideration of your services (the “*RSU Award*”). Your RSU Award is subject to all of the terms and conditions as set forth herein and in the Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan (the “*Plan*”) and the Award Agreement (the “*Agreement*”), which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Agreement shall have the meanings set forth in the Plan or the Agreement.

Participant: _____
 Date of Grant: _____
 Vesting Commencement Date: _____
 Number of Restricted Stock Units (“*RSUs*”): _____

Vesting Schedule: Subject to the Participant’s Continuous Service through each applicable vesting date, 25% of the RSUs will vest on [the first Quarterly Date that occurs on or following the first anniversary of the Vesting Commencement Date] and the remaining portion of the RSUs shall vest in equal installments on each Quarterly Date that occurs thereafter.

“*Quarterly Date*” means each of May 15, August 15, November 15 and February 15.

Issuance Schedule: One share of Common Stock will be issued at the time set forth in Section 6 of the Agreement for each restricted stock unit which vests.

Participant Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The RSU Award is governed by this RSU Award Grant Notice (the “*Grant Notice*”), and the provisions of the Plan and the Agreement, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Agreement (together, the “*RSU Award Agreement*”) may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.
- You have read and are familiar with the provisions of the Plan, the RSU Award Agreement and the Prospectus. In the event of any conflict between the provisions in the RSU Award Agreement, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.

- The RSU Award Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of: (i) other equity awards previously granted to you, and (ii) any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this RSU Award.

ARTIVA BIOTHERAPEUTICS, INC.

By: _____
Signature
Title: _____
Date: _____

PARTICIPANT:

Signature
Date: _____

ATTACHMENTS: Award Agreement, 2024 Equity Incentive Plan, Prospectus

ATTACHMENT I

**ARTIVA BIOTHERAPEUTICS, INC.
AWARD AGREEMENT
(2024 EQUITY INCENTIVE PLAN)**

As reflected by your RSU Award Grant Notice (“**Grant Notice**”), Artiva Biotherapeutics, Inc. (the “**Company**”) has granted you a RSU Award under the Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan (the “**Plan**”) for the number of restricted stock units as indicated in your Grant Notice (the “**RSU Award**”). The terms of your RSU Award as specified in this Award Agreement for your RSU Award (this “**Agreement**”) and the Grant Notice constitute your “**RSU Award Agreement**”. Defined terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the same definitions as in the Grant Notice or Plan, as applicable.

The general terms applicable to your RSU Award are as follows:

1. GOVERNING PLAN DOCUMENT. Your RSU Award is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 of the Plan regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your RSU Award;

(b) Section 9(e) of the Plan regarding the Company’s retained rights to terminate your Continuous Service notwithstanding the grant of the RSU Award; and

(c) Section 8 of the Plan regarding the tax consequences of your RSU Award.

Your RSU Award is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the RSU Award Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. GRANT OF THE RSU AWARD. This RSU Award represents your right to be issued on a future date the number of shares of the Company’s Common Stock that is equal to the number of restricted stock units indicated in the Grant Notice as modified to reflect any Capitalization Adjustment and subject to your satisfaction of the vesting conditions set forth therein (the “**Restricted Stock Units**”). Any additional Restricted Stock Units that become subject to the RSU Award pursuant to Capitalization Adjustments as set forth in the Plan and the provisions of Section 3 below, if any, shall be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Restricted Stock Units covered by your RSU Award.

3. VESTING. Subject to the limitations contained herein, the Award will vest in accordance with the vesting schedule provided in the Grant Notice. Upon the cessation of your Continuous Service for any reason, any Restricted Stock Units that have not vested will be forfeited at no cost to the Company and you will have no further right, title or interest in such Restricted Stock Units or the shares of Common Stock covered thereby.

4. DIVIDENDS. You shall receive no benefit or adjustment to this RSU Award with respect to any cash dividend, stock dividend or other distribution that does not result from a Capitalization Adjustment; provided, however, that this sentence will not apply with respect to any shares of Common Stock that are delivered to you in connection with your RSU Award after such shares have been delivered to you.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for, any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with your RSU Award (the “**Withholding Obligation**”) in accordance with the withholding procedures established by the Company. Unless the Withholding Obligation is satisfied, the Company shall have no obligation to deliver to you any Common Stock in respect of the RSU Award. In the event the Withholding Obligation of the Company arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Withholding Obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. DATE OF ISSUANCE.

(a) The issuance of shares in respect of the Restricted Stock Units is intended to comply with Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such a manner. Subject to the satisfaction of the Withholding Obligation, if any, in the event one or more Restricted Stock Units vests, the Company shall issue to you one (1) share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 above, and subject to any different provisions in the Grant Notice). Each issuance date determined by this paragraph is referred to as an “**Original Issuance Date**.”

(b) If the Original Issuance Date falls on a date that is not a business day, delivery shall instead occur on the next following business day. In addition, if:

(i) the Original Issuance Date does not occur (1) during an “open window period” applicable to you, as determined by the Company in accordance with the Company’s then-effective policy on trading in Company securities, or (2) on a date when you are otherwise permitted to sell shares of Common Stock on an established stock exchange or stock market (including but not limited to under a previously established written trading plan that meets the requirements of Rule 10b5-1 under the Exchange Act and was entered into in compliance with the Company’s policies (a “**10b5-1 Arrangement**”), and

(ii) either (1) a Withholding Obligation does not apply, or (2) the Company decides, prior to the Original Issuance Date, (A) not to satisfy the Withholding Obligation by withholding shares of Common Stock from the shares otherwise due, on the Original Issuance Date, to you under this Award, and (B) not to permit you to enter into a “same day sale” commitment with a broker-dealer (including but not limited to a commitment under a 10b5-1 Arrangement) and (C) not to permit you to pay your Withholding Obligation in cash,

then the shares that would otherwise be issued to you on the Original Issuance Date will not be delivered on such Original Issuance Date and will instead be delivered on the first business day when you are not prohibited from selling shares of the Company's Common Stock in the open public market, but in no event later than December 31 of the calendar year in which the Original Issuance Date occurs (that is, the last day of your taxable year in which the Original Issuance Date occurs), or, if and only if permitted in a manner that complies with Treasury Regulations Section 1.409A-1(b)(4), no later than the date that is the 15th day of the third calendar month of the applicable year following the year in which the shares of Common Stock under this Award are no longer subject to a "substantial risk of forfeiture" within the meaning of Treasury Regulations Section 1.409A-1(d).

(c) To the extent the RSU Award is a Non-Exempt Award, the provisions of Section 11 of the Plan shall apply.

7. TRANSFERABILITY. Except as otherwise provided in the Plan, your RSU Award is not transferable, except by will or by the applicable laws of descent and distribution.

8. CORPORATE TRANSACTION. Your RSU Award is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

9. NO LIABILITY FOR TAXES. As a condition to accepting the RSU Award, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the RSU Award or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the RSU Award and have either done so or knowingly and voluntarily declined to do so.

10. NO ADVICE REGARDING GRANT. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying shares of Common Stock. You should consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

11. CHOICE OF LAW. The RSU Award and any controversy arising out of or relating to the RSU Award shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

12. SEVERABILITY. If any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. IMPOSITION OF OTHER REQUIREMENTS. The Company reserves the right to impose other requirements on your participation in the Plan, on the RSU Award and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

14. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

15. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your RSU Award, including a summary of the applicable federal income tax consequences please see the Prospectus.

* * * *

ATTACHMENT II

2024 EQUITY INCENTIVE PLAN

1.

ARTIVA BIOTHERAPEUTICS, INC.
RSU AWARD GRANT NOTICE
(2024 EQUITY INCENTIVE PLAN)

Artiva Biotherapeutics, Inc. (the “**Company**”) has awarded to you (the “**Participant**”) the number of restricted stock units specified and on the terms set forth below in consideration of your services (the “**RSU Award**”). Your RSU Award is subject to all of the terms and conditions as set forth herein and in the Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan (the “**Plan**”) and the Award Agreement (the “**Agreement**”), which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Agreement shall have the meanings set forth in the Plan or the Agreement.

Participant: _____
Date of Grant: _____
Vesting Commencement Date: _____
Number of Restricted Stock Units (“**RSUs**”): _____

Vesting Schedule: [Initial Grant] Subject to the Participant’s Continuous Service through each applicable vesting date, the RSUs shall vest in a series of 12 successive substantially equal installments on each Quarterly Date that occurs following the Vesting Commencement Date.

[Annual Grant] Subject to the Participant’s Continuous Service through each applicable vesting date, the RSUs will vest in full on the earlier of the date that is 12 months following the Date of Grant or the date of the Company’s next annual stockholder meeting following the Date of Grant.

“**Quarterly Date**” means each of May 15, August 15, November 15 and February 15.

Notwithstanding anything in this Agreement to the contrary, if a Change in Control occurs prior to the termination of the Participant’s Continuous Service, then, as of the date of the effective time of such Change in Control, the vesting of the RSUs shall be accelerated in full.

Issuance Schedule: One share of Common Stock will be issued at the time set forth in Section 6 of the Agreement for each restricted stock unit which vests.

Participant Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The RSU Award is governed by this RSU Award Grant Notice (the “**Grant Notice**”), and the provisions of the Plan and the Agreement, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Agreement (together, the “**RSU Award Agreement**”) may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.

- You have read and are familiar with the provisions of the Plan, the RSU Award Agreement and the Prospectus. In the event of any conflict between the provisions in the RSU Award Agreement, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.
- The RSU Award Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of: (i) other equity awards previously granted to you, and (ii) any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this RSU Award.

ARTIVA BIOTHERAPEUTICS, INC.

PARTICIPANT:

By: _____
Signature

Title: _____

Date: _____

Signature

Date: _____

ATTACHMENTS: Award Agreement, 2024 Equity Incentive Plan, Prospectus

ATTACHMENT I

**ARTIVA BIOTHERAPEUTICS, INC.
AWARD AGREEMENT
(2024 EQUITY INCENTIVE PLAN)**

As reflected by your RSU Award Grant Notice (“**Grant Notice**”), Artiva Biotherapeutics, Inc. (the “**Company**”) has granted you a RSU Award under the Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan (the “**Plan**”) for the number of restricted stock units as indicated in your Grant Notice (the “**RSU Award**”). The terms of your RSU Award as specified in this Award Agreement for your RSU Award (this “**Agreement**”) and the Grant Notice constitute your “**RSU Award Agreement**”. Defined terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the same definitions as in the Grant Notice or Plan, as applicable.

The general terms applicable to your RSU Award are as follows:

1. GOVERNING PLAN DOCUMENT. Your RSU Award is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 of the Plan regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your RSU Award;

(b) Section 9(e) of the Plan regarding the Company’s retained rights to terminate your Continuous Service notwithstanding the grant of the RSU Award; and

(c) Section 8 of the Plan regarding the tax consequences of your RSU Award.

Your RSU Award is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the RSU Award Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. GRANT OF THE RSU AWARD. This RSU Award represents your right to be issued on a future date the number of shares of the Company’s Common Stock that is equal to the number of restricted stock units indicated in the Grant Notice as modified to reflect any Capitalization Adjustment and subject to your satisfaction of the vesting conditions set forth therein (the “**Restricted Stock Units**”). Any additional Restricted Stock Units that become subject to the RSU Award pursuant to Capitalization Adjustments as set forth in the Plan and the provisions of Section 3 below, if any, shall be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Restricted Stock Units covered by your RSU Award.

3. VESTING. Subject to the limitations contained herein, the Award will vest in accordance with the vesting schedule provided in the Grant Notice. Upon the cessation of your Continuous Service for any reason, any Restricted Stock Units that have not vested will be forfeited at no cost to the Company and you will have no further right, title or interest in such Restricted Stock Units or the shares of Common Stock covered thereby.

4. DIVIDENDS. You shall receive no benefit or adjustment to this RSU Award with respect to any cash dividend, stock dividend or other distribution that does not result from a Capitalization Adjustment; provided, however, that this sentence will not apply with respect to any shares of Common Stock that are delivered to you in connection with your RSU Award after such shares have been delivered to you.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for, any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with your RSU Award (the “**Withholding Obligation**”) in accordance with the withholding procedures established by the Company. Unless the Withholding Obligation is satisfied, the Company shall have no obligation to deliver to you any Common Stock in respect of the RSU Award. In the event the Withholding Obligation of the Company arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Withholding Obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. DATE OF ISSUANCE.

(a) The issuance of shares in respect of the Restricted Stock Units is intended to comply with Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such a manner. Subject to the satisfaction of the Withholding Obligation, if any, in the event one or more Restricted Stock Units vests, the Company shall issue to you one (1) share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 above, and subject to any different provisions in the Grant Notice). Each issuance date determined by this paragraph is referred to as an “**Original Issuance Date**.”

(b) If the Original Issuance Date falls on a date that is not a business day, delivery shall instead occur on the next following business day. In addition, if:

(i) the Original Issuance Date does not occur (1) during an “open window period” applicable to you, as determined by the Company in accordance with the Company’s then-effective policy on trading in Company securities, or (2) on a date when you are otherwise permitted to sell shares of Common Stock on an established stock exchange or stock market (including but not limited to under a previously established written trading plan that meets the requirements of Rule 10b5-1 under the Exchange Act and was entered into in compliance with the Company’s policies (a “**10b5-1 Arrangement**”)), and

(ii) either (1) a Withholding Obligation does not apply, or (2) the Company decides, prior to the Original Issuance Date, (A) not to satisfy the Withholding Obligation by withholding shares of Common Stock from the shares otherwise due, on the Original Issuance Date, to you under this Award, and (B) not to permit you to enter into a “same day sale” commitment with a broker-dealer (including but not limited to a commitment under a 10b5-1 Arrangement) and (C) not to permit you to pay your Withholding Obligation in cash,

then the shares that would otherwise be issued to you on the Original Issuance Date will not be delivered on such Original Issuance Date and will instead be delivered on the first business day when you are not prohibited from selling shares of the Company's Common Stock in the open public market, but in no event later than December 31 of the calendar year in which the Original Issuance Date occurs (that is, the last day of your taxable year in which the Original Issuance Date occurs), or, if and only if permitted in a manner that complies with Treasury Regulations Section 1.409A-1(b)(4), no later than the date that is the 15th day of the third calendar month of the applicable year following the year in which the shares of Common Stock under this Award are no longer subject to a "substantial risk of forfeiture" within the meaning of Treasury Regulations Section 1.409A-1(d).

(c) To the extent the RSU Award is a Non-Exempt Award, the provisions of Section 11 of the Plan shall apply.

7. TRANSFERABILITY. Except as otherwise provided in the Plan, your RSU Award is not transferable, except by will or by the applicable laws of descent and distribution.

8. CORPORATE TRANSACTION. Your RSU Award is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

9. NO LIABILITY FOR TAXES. As a condition to accepting the RSU Award, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the RSU Award or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the RSU Award and have either done so or knowingly and voluntarily declined to do so.

10. NO ADVICE REGARDING GRANT. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying shares of Common Stock. You should consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

11. CHOICE OF LAW. The RSU Award and any controversy arising out of or relating to the RSU Award shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

12. SEVERABILITY. If any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. IMPOSITION OF OTHER REQUIREMENTS. The Company reserves the right to impose other requirements on your participation in the Plan, on the RSU Award and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

14. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

15. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your RSU Award, including a summary of the applicable federal income tax consequences please see the Prospectus.

* * * *

ATTACHMENT II

2024 EQUITY INCENTIVE PLAN

1.

ARTIVA BIOTHERAPEUTICS, INC.
RSU AWARD GRANT NOTICE
(2024 EQUITY INCENTIVE PLAN)

Artiva Biotherapeutics, Inc. (the “**Company**”) has awarded to you (the “**Participant**”) the number of restricted stock units specified and on the terms set forth below in consideration of your services (the “**RSU Award**”). Your RSU Award is subject to all of the terms and conditions as set forth herein and in the Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan (the “**Plan**”) and the Award Agreement (the “**Agreement**”), which are attached hereto and incorporated herein in their entirety. Capitalized terms not explicitly defined herein but defined in the Plan or the Agreement shall have the meanings set forth in the Plan or the Agreement.

Participant: _____
Date of Grant: _____
Vesting Commencement Date: _____
Number of Restricted Stock Units (“**RSUs**”): _____

Vesting Schedule: Subject to the Participant’s Continuous Service through each applicable vesting date, the RSUs shall vest as follows: [25% of the RSUs will vest on [the first Quarterly Date that occurs on or following the first anniversary of the Vesting Commencement Date] and the remaining portion of the RSUs shall vest in equal installments on each Quarterly Date that occurs thereafter.

“**Quarterly Date**” means each of May 15, August 15, November 15 and February 15.

Notwithstanding anything in this Agreement to the contrary, if a Change in Control occurs and upon or within three months prior to, or 12 months after, the effective time of such Change in Control, the Participant’s Continuous Service terminates due to an involuntary termination (not including death or Disability) without Cause or due to the Participant’s voluntary resignation for Good Reason, then, as of the date of termination of the Participant’s Continuous Service or the effective time of such Change in Control (whichever occurs later), the vesting of the RSUs shall be accelerated in full.

Issuance Schedule: One share of Common Stock will be issued at the time set forth in Section 6 of the Agreement for each restricted stock unit which vests.

Participant Acknowledgements: By your signature below or by electronic acceptance or authentication in a form authorized by the Company, you understand and agree that:

- The RSU Award is governed by this RSU Award Grant Notice (the “**Grant Notice**”), and the provisions of the Plan and the Agreement, all of which are made a part of this document. Unless otherwise provided in the Plan, this Grant Notice and the Agreement (together, the “**RSU Award Agreement**”) may not be modified, amended or revised except in a writing signed by you and a duly authorized officer of the Company.

- You have read and are familiar with the provisions of the Plan, the RSU Award Agreement and the Prospectus. In the event of any conflict between the provisions in the RSU Award Agreement, or the Prospectus and the terms of the Plan, the terms of the Plan shall control.
- The RSU Award Agreement sets forth the entire understanding between you and the Company regarding the acquisition of Common Stock and supersedes all prior oral and written agreements, promises and/or representations on that subject with the exception of: (i) other equity awards previously granted to you, and (ii) any written employment agreement, offer letter, severance agreement, written severance plan or policy, or other written agreement between the Company and you in each case that specifies the terms that should govern this RSU Award.

ARTIVA BIOTHERAPEUTICS, INC.

PARTICIPANT:

By: _____
Signature

Title: _____

Date: _____

Signature

Date: _____

ATTACHMENTS: Award Agreement, 2024 Equity Incentive Plan, Prospectus

ATTACHMENT I

ARTIVA BIOTHERAPEUTICS, INC.
AWARD AGREEMENT
(2024 EQUITY INCENTIVE PLAN)

As reflected by your RSU Award Grant Notice (“**Grant Notice**”), Artiva Biotherapeutics, Inc. (the “**Company**”) has granted you a RSU Award under the Artiva Biotherapeutics, Inc. 2024 Equity Incentive Plan (the “**Plan**”) for the number of restricted stock units as indicated in your Grant Notice (the “**RSU Award**”). The terms of your RSU Award as specified in this Award Agreement for your RSU Award (this “**Agreement**”) and the Grant Notice constitute your “**RSU Award Agreement**”. Defined terms not explicitly defined in this Agreement but defined in the Grant Notice or the Plan shall have the same definitions as in the Grant Notice or Plan, as applicable.

The general terms applicable to your RSU Award are as follows:

1. GOVERNING PLAN DOCUMENT. Your RSU Award is subject to all the provisions of the Plan, including but not limited to the provisions in:

(a) Section 6 of the Plan regarding the impact of a Capitalization Adjustment, dissolution, liquidation, or Corporate Transaction on your RSU Award;

(b) Section 9(e) of the Plan regarding the Company’s retained rights to terminate your Continuous Service notwithstanding the grant of the RSU Award; and

(c) Section 8 of the Plan regarding the tax consequences of your RSU Award.

Your RSU Award is further subject to all interpretations, amendments, rules and regulations, which may from time to time be promulgated and adopted pursuant to the Plan. In the event of any conflict between the RSU Award Agreement and the provisions of the Plan, the provisions of the Plan shall control.

2. GRANT OF THE RSU AWARD. This RSU Award represents your right to be issued on a future date the number of shares of the Company’s Common Stock that is equal to the number of restricted stock units indicated in the Grant Notice as modified to reflect any Capitalization Adjustment and subject to your satisfaction of the vesting conditions set forth therein (the “**Restricted Stock Units**”). Any additional Restricted Stock Units that become subject to the RSU Award pursuant to Capitalization Adjustments as set forth in the Plan and the provisions of Section 3 below, if any, shall be subject, in a manner determined by the Board, to the same forfeiture restrictions, restrictions on transferability, and time and manner of delivery as applicable to the other Restricted Stock Units covered by your RSU Award.

3. VESTING. Subject to the limitations contained herein, the Award will vest in accordance with the vesting schedule provided in the Grant Notice. Upon the cessation of your Continuous Service for any reason, any Restricted Stock Units that have not vested will be forfeited at no cost to the Company and you will have no further right, title or interest in such Restricted Stock Units or the shares of Common Stock covered thereby.

4. DIVIDENDS. You shall receive no benefit or adjustment to this RSU Award with respect to any cash dividend, stock dividend or other distribution that does not result from a Capitalization Adjustment; provided, however, that this sentence will not apply with respect to any shares of Common Stock that are delivered to you in connection with your RSU Award after such shares have been delivered to you.

5. WITHHOLDING OBLIGATIONS. As further provided in Section 8 of the Plan, you hereby authorize withholding from payroll and any other amounts payable to you, and otherwise agree to make adequate provision for, any sums required to satisfy the federal, state, local and foreign tax withholding obligations, if any, which arise in connection with your RSU Award (the “**Withholding Obligation**”) in accordance with the withholding procedures established by the Company. Unless the Withholding Obligation is satisfied, the Company shall have no obligation to deliver to you any Common Stock in respect of the RSU Award. In the event the Withholding Obligation of the Company arises prior to the delivery to you of Common Stock or it is determined after the delivery of Common Stock to you that the amount of the Withholding Obligation was greater than the amount withheld by the Company, you agree to indemnify and hold the Company harmless from any failure by the Company to withhold the proper amount.

6. DATE OF ISSUANCE.

(a) The issuance of shares in respect of the Restricted Stock Units is intended to comply with Treasury Regulations Section 1.409A-1(b)(4) and will be construed and administered in such a manner. Subject to the satisfaction of the Withholding Obligation, if any, in the event one or more Restricted Stock Units vests, the Company shall issue to you one (1) share of Common Stock for each Restricted Stock Unit that vests on the applicable vesting date(s) (subject to any adjustment under Section 3 above, and subject to any different provisions in the Grant Notice). Each issuance date determined by this paragraph is referred to as an “**Original Issuance Date**.”

(b) If the Original Issuance Date falls on a date that is not a business day, delivery shall instead occur on the next following business day. In addition, if:

(i) the Original Issuance Date does not occur (1) during an “open window period” applicable to you, as determined by the Company in accordance with the Company’s then-effective policy on trading in Company securities, or (2) on a date when you are otherwise permitted to sell shares of Common Stock on an established stock exchange or stock market (including but not limited to under a previously established written trading plan that meets the requirements of Rule 10b5-1 under the Exchange Act and was entered into in compliance with the Company’s policies (a “**10b5-1 Arrangement**”)), and

(ii) either (1) a Withholding Obligation does not apply, or (2) the Company decides, prior to the Original Issuance Date, (A) not to satisfy the Withholding Obligation by withholding shares of Common Stock from the shares otherwise due, on the Original Issuance Date, to you under this Award, and (B) not to permit you to enter into a “same day sale” commitment with a broker-dealer (including but not limited to a commitment under a 10b5-1 Arrangement) and (C) not to permit you to pay your Withholding Obligation in cash,

then the shares that would otherwise be issued to you on the Original Issuance Date will not be delivered on such Original Issuance Date and will instead be delivered on the first business day when you are not prohibited from selling shares of the Company's Common Stock in the open public market, but in no event later than December 31 of the calendar year in which the Original Issuance Date occurs (that is, the last day of your taxable year in which the Original Issuance Date occurs), or, if and only if permitted in a manner that complies with Treasury Regulations Section 1.409A-1(b)(4), no later than the date that is the 15th day of the third calendar month of the applicable year following the year in which the shares of Common Stock under this Award are no longer subject to a "substantial risk of forfeiture" within the meaning of Treasury Regulations Section 1.409A-1(d).

(c) To the extent the RSU Award is a Non-Exempt Award, the provisions of Section 11 of the Plan shall apply.

7. TRANSFERABILITY. Except as otherwise provided in the Plan, your RSU Award is not transferable, except by will or by the applicable laws of descent and distribution.

8. CORPORATE TRANSACTION. Your RSU Award is subject to the terms of any agreement governing a Corporate Transaction involving the Company, including, without limitation, a provision for the appointment of a stockholder representative that is authorized to act on your behalf with respect to any escrow, indemnities and any contingent consideration.

9. NO LIABILITY FOR TAXES. As a condition to accepting the RSU Award, you hereby (a) agree to not make any claim against the Company, or any of its Officers, Directors, Employees or Affiliates related to tax liabilities arising from the RSU Award or other Company compensation and (b) acknowledge that you were advised to consult with your own personal tax, financial and other legal advisors regarding the tax consequences of the RSU Award and have either done so or knowingly and voluntarily declined to do so.

10. NO ADVICE REGARDING GRANT. The Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding your participation in the Plan, or your acquisition or sale of the underlying shares of Common Stock. You should consult with your own personal tax, legal and financial advisors regarding your participation in the Plan before taking any action related to the Plan.

11. CHOICE OF LAW. The RSU Award and any controversy arising out of or relating to the RSU Award shall be governed by, and construed in accordance with, the internal laws of the State of Delaware, without regard to conflict of law principles that would result in any application of any law other than the law of the State of Delaware.

12. SEVERABILITY. If any part of this Agreement or the Plan is declared by any court or governmental authority to be unlawful or invalid, such unlawfulness or invalidity will not invalidate any portion of this Agreement or the Plan not declared to be unlawful or invalid. Any Section of this Agreement (or part of such a Section) so declared to be unlawful or invalid will, if possible, be construed in a manner which will give effect to the terms of such Section or part of a Section to the fullest extent possible while remaining lawful and valid.

13. IMPOSITION OF OTHER REQUIREMENTS. The Company reserves the right to impose other requirements on your participation in the Plan, on the RSU Award and on any shares of Common Stock acquired under the Plan, to the extent the Company determines it is necessary or advisable for legal or administrative reasons, and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.

14. OTHER DOCUMENTS. You hereby acknowledge receipt of or the right to receive a document providing the information required by Rule 428(b)(1) promulgated under the Securities Act, which includes the Prospectus. In addition, you acknowledge receipt of the Company's Trading Policy.

15. QUESTIONS. If you have questions regarding these or any other terms and conditions applicable to your RSU Award, including a summary of the applicable federal income tax consequences please see the Prospectus.

* * * *

ATTACHMENT II

2024 EQUITY INCENTIVE PLAN

1.

ARTIVA BIOTHERAPEUTICS, INC.
2024 EMPLOYEE STOCK PURCHASE PLAN

ADOPTED BY THE BOARD OF DIRECTORS: [____], 2024

APPROVED BY THE STOCKHOLDERS: [____], 2024

IPO DATE: [____], 2024

1. GENERAL; PURPOSE.

(a) The Plan provides a means by which Eligible Employees of the Company and certain Designated Companies may be given an opportunity to purchase shares of Common Stock. The Plan permits the Company to grant a series of Purchase Rights to Eligible Employees under an Employee Stock Purchase Plan. In addition, the Plan permits the Company to grant a series of Purchase Rights to Eligible Employees that do not meet the requirements of an Employee Stock Purchase Plan.

(b) The Plan includes two components: a 423 Component and a Non-423 Component. The Company intends (but makes no undertaking or representation to maintain) the 423 Component to qualify as an Employee Stock Purchase Plan. The provisions of the 423 Component, accordingly, will be construed in a manner that is consistent with the requirements of Section 423 of the Code. In addition, this Plan authorizes grants of Purchase Rights under the Non-423 Component that do not meet the requirements of an Employee Stock Purchase Plan. Except as otherwise provided in the Plan or determined by the Board, the Non-423 Component will operate and be administered in the same manner as the 423 Component. In addition, the Company may make separate Offerings which vary in terms (provided that such terms are not inconsistent with the provisions of the Plan or the requirements of an Employee Stock Purchase Plan to the extent the Offering is made under the 423 Component), and the Company will designate which Designated Company is participating in each separate Offering.

(c) The Company, by means of the Plan, seeks to retain the services of Eligible Employees, to secure and retain the services of new Employees and to provide incentives for such persons to exert maximum efforts for the success of the Company and its Related Corporations.

2. ADMINISTRATION.

(a) The Board will administer the Plan unless and until the Board delegates administration of the Plan to a Committee or Committees, as provided in Section 2(c).

(b) The Board will have the power, subject to, and within the limitations of, the express provisions of the Plan:

(i) To determine how and when Purchase Rights will be granted and the provisions of each Offering (which need not be identical).

(ii) To designate from time to time (A) which Related Corporations will be eligible to participate in the Plan as Designated 423 Companies, (B) which Related Corporations or Affiliates will be eligible to participate in the Plan as Designated Non-423 Companies, (C) which Affiliates or Related Corporations may be excluded from participation in the Plan, and (D) which Designated Companies will participate in each separate Offering (to the extent that the Company makes separate Offerings).

(iii) To construe and interpret the Plan and Purchase Rights, and to establish, amend and revoke rules and regulations for its administration. The Board, in the exercise of this power, may correct any defect, omission or inconsistency in the Plan, in a manner and to the extent it deems necessary or expedient to make the Plan fully effective.

(iv) To settle all controversies regarding the Plan and Purchase Rights granted under the Plan.

(v) To suspend or terminate the Plan at any time as provided in Section 12.

(vi) To amend the Plan at any time as provided in Section 12.

(vii) Generally, to exercise such powers and to perform such acts as it deems necessary or expedient to promote the best interests of the Company, its Related Corporations and Affiliates, and to carry out the intent that the Plan be treated as an Employee Stock Purchase Plan with respect to the 423 Component.

(viii) To adopt such rules, procedures and sub-plans as are necessary or appropriate to permit or facilitate participation in the Plan by Employees who are non-U.S. nationals or employed or located outside the United States. Without limiting the generality of, and consistent with, the foregoing, the Board specifically is authorized to adopt rules, procedures, and sub-plans regarding, without limitation, eligibility to participate in the Plan, the definition of eligible "earnings," handling and making of Contributions, establishment of bank or trust accounts to hold Contributions, payment of interest, conversion of local currency, obligations to pay payroll tax, determination of beneficiary designation requirements, withholding procedures and handling of share issuances, any of which may vary according to applicable requirements, and which, if applicable to a Designated Non-423 Company, do not have to comply with the requirements of Section 423 of the Code.

(c) The Board may delegate some or all of the administration of the Plan to a Committee or Committees. If administration is delegated to a Committee, the Committee will have, in connection with the administration of the Plan, the powers theretofore possessed by the Board that have been delegated to the Committee, including the power to delegate to a subcommittee any of the administrative powers the Committee is authorized to exercise (and references in this Plan and any applicable Offering Document to the Board will thereafter be to the Committee or subcommittee), subject, however, to such resolutions, not inconsistent with the provisions of the Plan, as may be adopted from time to time by the Board. Further, to the extent not prohibited by Applicable Law, the Board or Committee may, from time to time, delegate some or all of its authority under the Plan to one or more officers of the Company or other persons or groups of persons as it deems necessary, appropriate or advisable under conditions or limitations that it may set at or after the time of the delegation. The Board may retain the authority to concurrently administer the Plan with the Committee (or its delegate) and may, at any time, revert in the Board some or all of the powers previously delegated. Whether or not the Board has delegated administration of the Plan to a Committee (or a delegate of the Committee), the Board will have the final power to determine all questions of policy and expediency that may arise in the administration of the Plan.

(d) All determinations, interpretations and constructions made by the Board will not be subject to review by any person and will be final, binding and conclusive on all persons.

3. SHARES OF COMMON STOCK SUBJECT TO THE PLAN.

(a) Subject to the provisions of Section 11(a) relating to Capitalization Adjustments, the maximum number of shares of Common Stock that may be issued under the Plan will not exceed [] shares of Common Stock, plus the number of shares of Common Stock that are automatically added on January 1st of each year for a period of up to ten years, commencing on January 1, 2025 and ending on (and including) January 1, 2034, in an amount equal to the lesser of (x) one percent (1%) of the total number of shares of Common Stock outstanding on December 31st of the preceding calendar year, and (y) [] shares of Common Stock. Notwithstanding the foregoing, the Board may act prior to the first day of any calendar year to provide that there will be no January 1st increase in the share reserve for such calendar year or that the increase in the share reserve for such calendar year will be a lesser number of shares of Common Stock than would otherwise occur pursuant to the preceding sentence. For the avoidance of doubt, up to the maximum number of shares of Common Stock reserved under this Section 3(a) may be used to satisfy purchases of Common Stock under the 423 Component and any remaining portion of such maximum number of shares may be used to satisfy purchases of Common Stock under the Non-423 Component.

(b) If any Purchase Right granted under the Plan terminates without having been exercised in full, the shares of Common Stock not purchased under such Purchase Right will again become available for issuance under the Plan.

(c) The stock purchasable under the Plan will be shares of authorized but unissued or reacquired Common Stock, including shares repurchased by the Company on the open market.

4. GRANT OF PURCHASE RIGHTS; OFFERING.

(a) The Board may from time to time grant or provide for the grant of Purchase Rights to Eligible Employees under an Offering (consisting of one or more Purchase Periods) on an Offering Date or Offering Dates selected by the Board. Each Offering will be in such form and will contain such terms and conditions as the Board will deem appropriate, and with respect to the 423 Component, will comply with the requirement of Section 423(b)(5) of the Code that all Employees granted Purchase Rights will have the same rights and privileges. The terms and conditions of an Offering shall be incorporated by reference into the Plan and treated as part of the Plan. The provisions of separate Offerings need not be identical, but each Offering will include (through incorporation of the provisions of this Plan by reference in the document comprising the Offering or otherwise) the period during which the Offering will be effective, which period will not exceed 27 months beginning with the Offering Date, and the substance of the provisions contained in Sections 5 through 8, inclusive.

(b) If a Participant has more than one Purchase Right outstanding under the Plan, unless such Participant otherwise indicates in forms delivered to the Company or a third party designated by the Company (each, a “*Company Designee*”): (i) each form will apply to all of the Participant’s Purchase Rights under the Plan, and (ii) a Purchase Right with a lower exercise price (or an earlier-granted Purchase Right, if different Purchase Rights have identical exercise prices) will be exercised to the fullest possible extent before a Purchase Right with a higher exercise price (or a later-granted Purchase Right if different Purchase Rights have identical exercise prices) will be exercised.

(c) The Board will have the discretion to structure an Offering so that if the Fair Market Value of a share of Common Stock on the first Trading Day of a new Purchase Period within that Offering is less than or equal to the Fair Market Value of a share of Common Stock on the Offering Date for that Offering, then (i) that Offering will terminate immediately as of that first Trading Day, and (ii) the Participants in such terminated Offering will be automatically enrolled in a new Offering beginning on the first Trading Day of such new Purchase Period.

5. ELIGIBILITY.

(a) Purchase Rights may be granted only to Employees of the Company or, as the Board may designate in accordance with Section 2(b), to Employees of a Related Corporation or an Affiliate. Except as provided in Section 5(b) or as required by Applicable Law, an Employee will not be eligible to be granted Purchase Rights unless, on the Offering Date, the Employee has been in the employ of the Company, the Related Corporation or the Affiliate, as the case may be, for such continuous period preceding such Offering Date as the Board may (unless prohibited by Applicable Law) require, but in no event will the required period of continuous employment be equal to or greater than two years. In addition, the Board may provide (unless prohibited by Applicable Law) that no Employee will be eligible to be granted Purchase Rights under the Plan unless, on the Offering Date, such Employee’s customary employment with the Company, the Related Corporation or the Affiliate is more than 20 hours per week and more than five months per calendar year or such other criteria as the Board may determine consistent with Section 423 of the Code with respect to the 423 Component. The Board may also exclude (unless prohibited by Applicable Law) from participation in the Plan or any Offering Employees who are “highly compensated employees” (within the meaning of Section 423(b)(4)(D) of the Code) of the Company, a Related Corporation or an Affiliate, or a subset of such highly compensated employees.

(b) The Board may provide that each person who, during the course of an Offering, first becomes an Eligible Employee will, on a date or dates specified in the Offering which coincides with the day on which such person becomes an Eligible Employee or which occurs thereafter, receive a Purchase Right under that Offering, which Purchase Right will thereafter be deemed to be a part of that Offering. Such Purchase Right will have the same characteristics as any Purchase Rights originally granted under that Offering, as described herein, except that:

(i) the date on which such Purchase Right is granted will be the “Offering Date” of such Purchase Right for all purposes, including determination of the exercise price of such Purchase Right;

(ii) the period of the Offering with respect to such Purchase Right will begin on its Offering Date and end coincident with the end of such Offering; and

(iii) the Board may provide that if such person first becomes an Eligible Employee within a specified period of time before the end of the Offering, the individual will not receive any Purchase Right under that Offering.

(c) No Employee will be eligible for the grant of any Purchase Rights under the 423 Component if, immediately after any such Purchase Rights are granted, such Employee owns stock possessing five percent or more of the total combined voting power or value of all classes of stock of the Company or of any Related Corporation. For purposes of this Section 5(c), the rules of Section 424(d) of the Code will apply in determining the stock ownership of any Employee, and stock which such Employee may purchase under all outstanding Purchase Rights and options will be treated as stock owned by such Employee.

(d) As specified by Section 423(b)(8) of the Code, an Eligible Employee may be granted Purchase Rights under the 423 Component only if such Purchase Rights, together with any other rights granted under all Employee Stock Purchase Plans of the Company and any Related Corporations, do not permit such Eligible Employee’s rights to purchase stock of the Company or any Related Corporation to accrue at a rate which, when aggregated, exceeds U.S. \$25,000 of Fair Market Value of such stock (determined at the time such rights are granted, and which, with respect to the Plan, will be determined as of their respective Offering Dates) for each calendar year in which such rights are outstanding at any time.

(e) Officers of the Company and any Designated Company, if they are otherwise Eligible Employees, will be eligible to participate in Offerings under the Plan. Notwithstanding the foregoing, the Board may (unless prohibited by Applicable Law) provide in an Offering that Employees who are highly compensated Employees within the meaning of Section 423(b)(4)(D) of the Code will not be eligible to participate.

(f) Notwithstanding anything in this Section 5 to the contrary, in the case of an Offering under the Non-423 Component, an Eligible Employee (or group of Eligible Employees) may be excluded from participation in the Plan or an Offering if the Board has determined, in its sole discretion, that participation of such Eligible Employee(s) is not advisable or practical for any reason.

6. PURCHASE RIGHTS; PURCHASE PRICE.

(a) On each Offering Date, each Eligible Employee, pursuant to an Offering made under the Plan, will be granted a Purchase Right to purchase up to that number of shares of Common Stock purchasable either with a percentage of earnings (as such concept is defined in the Offering Document) or with a maximum dollar amount, but in either case as so specified by the Board in the Offering Document, during the period that begins on the Offering Date (or such later date as the Board determines for a particular Offering) and ends on the date stated in the Offering, which date will be no later than the end of the Offering.

(b) The Board will establish one or more Purchase Dates during an Offering on which Purchase Rights granted for that Offering will be exercised and shares of Common Stock will be purchased in accordance with such Offering.

(c) In connection with each Offering made under the Plan, the Board may specify (i) a maximum number of shares of Common Stock that may be purchased by any Participant on any Purchase Date during such Offering, (ii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants pursuant to such Offering and/or (iii) a maximum aggregate number of shares of Common Stock that may be purchased by all Participants on any Purchase Date under the Offering. If the aggregate purchase of shares of Common Stock issuable upon exercise of Purchase Rights granted under the Offering would exceed any such maximum aggregate number, then, in the absence of any Board action otherwise, a pro rata (based on each Participant's accumulated Contributions) allocation of the shares of Common Stock (rounded down to the nearest whole share) available will be made in as nearly a uniform manner as will be practicable and equitable.

(d) The purchase price of shares of Common Stock acquired pursuant to Purchase Rights will be specified by the Board prior to commencement of an Offering and will not be less than the lesser of:

- (i) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the Offering Date; or
- (ii) an amount equal to 85% of the Fair Market Value of the shares of Common Stock on the applicable Purchase Date.

7. PARTICIPATION; WITHDRAWAL; TERMINATION.

(a) An Eligible Employee may elect to participate in an Offering and authorize payroll deductions as the means of making Contributions by completing and delivering to the Company or a Company Designee, within the time specified in the Offering, an enrollment form provided by the Company or a Company Designee. The enrollment form will specify the amount of Contributions not to exceed the maximum amount specified by the Board. Each Participant's Contributions will be credited to a bookkeeping account for such Participant under the Plan and will be deposited with the general funds of the Company except where Applicable Law requires that Contributions be held separately or deposited with a third party. If permitted in the Offering, a Participant may begin such Contributions with the first practicable payroll occurring on or after the Offering Date (or, in the case of a payroll date that occurs after the end of the prior Offering but before the Offering Date of the next new Offering, Contributions from such payroll will be included in the new Offering). If permitted in the Offering, a Participant may thereafter reduce (including to zero) or increase such Participant's Contributions. If payroll deductions are impermissible or problematic under Applicable Law or if specifically provided in the Offering and to the extent permitted by Section 423 of the Code with respect to the 423 Component, in addition to or instead of making Contributions by payroll deductions, a Participant may make Contributions through payment by cash, check or wire transfer prior to a Purchase Date.

(b) During an Offering, a Participant may cease making Contributions and withdraw from the Offering by delivering to the Company or a Company Designee a withdrawal form provided by the Company or a Company Designee. The Company may impose a deadline before a Purchase Date for withdrawing. Upon such withdrawal, such Participant's Purchase Right in that Offering will immediately terminate and the Company will distribute as soon as practicable to such Participant all of such Participant's accumulated but unused Contributions and such Participant's Purchase Right in that Offering shall thereupon terminate. A Participant's withdrawal from that Offering will have no effect upon such Participant's eligibility to participate in any other Offerings under the Plan, but such Participant will be required to deliver a new enrollment form to participate in subsequent Offerings.

(c) Purchase Rights granted pursuant to any Offering under the Plan will terminate immediately if the Participant either (i) is no longer an Employee for any reason or for no reason or (ii) is otherwise no longer eligible to participate. The Company will distribute as soon as practicable to such individual all of such individual's accumulated but unused Contributions.

(d) Unless otherwise determined by the Board, a Participant whose employment transfers or whose employment terminates with an immediate rehire (with no break in service) by or between the Company and a Designated Company or between Designated Companies will not be treated as having terminated employment for purposes of participating in the Plan or an Offering; however, if a Participant transfers from an Offering under the 423 Component to an Offering under the Non-423 Component, the exercise of the Participant's Purchase Right will be qualified under the 423 Component only to the extent such exercise complies with Section 423 of the Code. If a Participant transfers from an Offering under the Non-423 Component to an Offering under the 423 Component, the exercise of the Purchase Right will remain non-qualified under the Non-423 Component for the remainder of the Offering. The Board may establish different and additional rules governing transfers between separate Offerings within the 423 Component and between Offerings under the 423 Component and Offerings under the Non-423 Component.

(e) During a Participant's lifetime, Purchase Rights will be exercisable only by such Participant. Purchase Rights are not transferable by a Participant, except by will, by the laws of descent and distribution, or, if permitted by the Company and valid under Applicable Law, by a beneficiary designation as described in Section 10.

(f) Unless otherwise specified in the Offering or required by Applicable Law, the Company will have no obligation to pay interest on Contributions.

8. EXERCISE OF PURCHASE RIGHTS.

(a) On each Purchase Date, each Participant's accumulated Contributions will be applied to the purchase of shares of Common Stock, up to the maximum number of shares of Common Stock permitted by the Plan and the applicable Offering, at the purchase price specified in the Offering. No fractional shares will be issued unless specifically provided for in the Offering.

(b) Unless otherwise provided in the Offering, if any amount of accumulated Contributions remains in a Participant's account after the purchase of shares of Common Stock and such remaining amount is less than the amount required to purchase one share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be held in such Participant's account for the purchase of shares of Common Stock under the next Offering under the Plan, unless such Participant withdraws from or is not eligible to participate in such next Offering, in which case such amount will be distributed to such Participant after the final Purchase Date without interest (unless the payment of interest is otherwise required by Applicable Law). If the amount of Contributions remaining in a Participant's account after the purchase of shares of Common Stock is at least equal to the amount required to purchase one (1) whole share of Common Stock on the final Purchase Date of an Offering, then such remaining amount will be distributed in full to such Participant after the final Purchase Date of such Offering without interest (unless otherwise required by Applicable Law).

(c) No Purchase Rights may be exercised to any extent unless the shares of Common Stock to be issued upon such exercise under the Plan are covered by an effective registration statement pursuant to the Securities Act and the Plan is in material compliance with all applicable U.S. and non-U.S. federal, state and other securities, exchange control and other laws applicable to the Plan. If on a Purchase Date the shares of Common Stock are not so registered or the Plan is not in such compliance, no Purchase Rights will be exercised on such Purchase Date, and, subject to Section 423 of the Code with respect to the 423 Component, the Purchase Date will be delayed until the shares of Common Stock are subject to such an effective registration statement and the Plan is in material compliance, except that the Purchase Date will in no event be more than 27 months from the Offering Date. If, on the Purchase Date, as delayed to the maximum extent permissible, the shares of Common Stock are not registered and the Plan is not in material compliance with all Applicable Laws, as determined by the Company in its sole discretion, no Purchase Rights will be exercised and all accumulated but unused Contributions will be distributed to the Participants without interest (unless the payment of interest is otherwise required by Applicable Law).

9. COVENANTS OF THE COMPANY.

The Company will seek to obtain from each U.S. and non-U.S. federal, state or other regulatory commission, agency or other Governmental Body having jurisdiction over the Plan such authority as may be required to grant Purchase Rights and issue and sell shares of Common Stock thereunder unless the Company determines, in its sole discretion, that doing so is not practical or would cause the Company to incur costs that are unreasonable. If, after commercially reasonable efforts, the Company is unable to obtain the authority that counsel for the Company deems necessary for the grant of Purchase Rights or the lawful issuance and sale of Common Stock under the Plan, and at a commercially reasonable cost, the Company will be relieved from any liability for failure to grant Purchase Rights and/or to issue and sell Common Stock upon exercise of such Purchase Rights.

10. DESIGNATION OF BENEFICIARY.

(a) The Company may, but is not obligated to, permit a Participant to submit a form designating a beneficiary who will receive any shares of Common Stock and/or Contributions from the Participant's account under the Plan if the Participant dies before such shares and/or Contributions are delivered to the Participant. The Company may, but is not obligated to, permit the Participant to change such designation of beneficiary. Any such designation and/or change must be on a form approved by the Company.

(b) If a Participant dies, and in the absence of a valid beneficiary designation, the Company will deliver any shares of Common Stock and/or Contributions to the executor or administrator of the estate of the Participant. If no executor or administrator has been appointed (to the knowledge of the Company), the Company, in its sole discretion, may deliver such shares of Common Stock and/or Contributions, without interest (unless the payment of interest is otherwise required by Applicable Law), to the Participant's spouse, dependents or relatives, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

11. ADJUSTMENTS UPON CHANGES IN COMMON STOCK; CORPORATE TRANSACTIONS.

(a) In the event of a Capitalization Adjustment, the Board will appropriately and proportionately adjust: (i) the class(es) and maximum number of securities subject to the Plan pursuant to Section 3(a), (ii) the class(es) and maximum number of securities by which the share reserve is to increase automatically each year pursuant to Section 3(a), (iii) the class(es) and number of securities subject to, and the purchase price applicable to outstanding Offerings and Purchase Rights, and (iv) the class(es) and number of securities that are the subject of the purchase limits under each ongoing Offering. The Board will make these adjustments, and its determination will be final, binding and conclusive.

(b) In the event of a Corporate Transaction, then: (i) any surviving corporation or acquiring corporation (or the surviving or acquiring corporation's parent company) may assume or continue outstanding Purchase Rights or may substitute similar rights (including a right to acquire the same consideration paid to the stockholders in the Corporate Transaction) for outstanding Purchase Rights, or (ii) if any surviving or acquiring corporation (or its parent company) does not assume or continue such Purchase Rights or does not substitute similar rights for such Purchase Rights, then the Participants' accumulated Contributions will be used to purchase shares of Common Stock (rounded down to the nearest whole share) within ten business days (or such other period specified by the Board) prior to the Corporate Transaction under the outstanding Purchase Rights, and the Purchase Rights will terminate immediately after such purchase.

12. AMENDMENT, TERMINATION OR SUSPENSION OF THE PLAN.

(a) The Board may amend the Plan at any time in any respect the Board deems necessary or advisable. However, except as provided in Section 11(a) relating to Capitalization Adjustments, stockholder approval will be required for any amendment of the Plan for which stockholder approval is required by Applicable Law.

(b) The Board may suspend or terminate the Plan at any time. No Purchase Rights may be granted under the Plan while the Plan is suspended or after it is terminated.

(c) Any benefits, privileges, entitlements and obligations under any outstanding Purchase Rights granted before an amendment, suspension or termination of the Plan will not be materially impaired by any such amendment, suspension or termination except (i) with the consent of the person to whom such Purchase Rights were granted, (ii) as necessary to facilitate compliance with any laws, listing requirements, or governmental regulations (including, without limitation, the provisions of Section 423 of the Code and the regulations and other interpretive guidance issued thereunder relating to Employee Stock Purchase Plans) including without limitation any such regulations or other guidance that may be issued or amended after the date the Plan is adopted by the Board, or (iii) as necessary to obtain or maintain favorable tax, listing, or regulatory treatment. To be clear, the Board may amend outstanding Purchase Rights without a Participant's consent if such amendment is necessary to ensure that the Purchase Right and/or the Plan complies with the requirements of Section 423 of the Code with respect to the 423 Component or with respect to other Applicable Laws. Notwithstanding anything in the Plan or any Offering Document to the contrary, the Board will be entitled to: (i) establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars; (ii) permit Contributions in excess of the amount designated by a Participant in order to adjust for mistakes in the Company's processing of properly completed Contribution elections; (iii) establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each Participant properly correspond with amounts withheld from the Participant's Contributions; (iv) amend any outstanding Purchase Rights or clarify any ambiguities regarding the terms of any Offering to enable the Purchase Rights to qualify under and/or comply with Section 423 of the Code with respect to the 423 Component; and (v) establish other limitations or procedures as the Board determines in its sole discretion advisable that are consistent with the Plan. The actions of the Board pursuant to this paragraph will not be considered to alter or impair any Purchase Rights granted under an Offering as they are part of the initial terms of each Offering and the Purchase Rights granted under each Offering.

13. TAX QUALIFICATION; TAX WITHHOLDING.

(a) Although the Company may endeavor to (i) qualify a Purchase Right for special tax treatment under the laws of the United States or jurisdictions outside of the United States or (ii) avoid adverse tax treatment, the Company makes no representation to that effect and expressly disavows any covenant to maintain special or to avoid unfavorable tax treatment, notwithstanding anything to the contrary in this Plan. The Company will be unconstrained in its corporate activities without regard to the potential negative tax impact on Participants.

(b) Each Participant will make arrangements, satisfactory to the Company and any applicable Related Corporation or Affiliate, to enable the Company, the Related Corporation or the Affiliate to fulfill any withholding obligation for Tax-Related Items. Without limitation to the foregoing, in the Company's sole discretion and subject to Applicable Law, such withholding obligation may be satisfied in whole or in part by (i) withholding from the Participant's salary or any other cash payment due to the Participant from the Company, a Related Corporation or an Affiliate; (ii) withholding from the proceeds of the sale of shares of Common Stock acquired under the Plan, either through a voluntary sale or a mandatory sale arranged by the Company; or (iii) any other method deemed acceptable by the Board. The Company shall not be required to issue any shares of Common Stock under the Plan until such obligations are satisfied.

(c) The 423 Component is exempt from the application of Section 409A of the Code, and any ambiguities herein shall be interpreted to so be exempt from Section 409A of the Code. The Non-423 Component is intended to be exempt from the application of Section 409A of the Code under the short-term deferral exception and any ambiguities shall be construed and interpreted in accordance with such intent. In furtherance of the foregoing and notwithstanding any provision in the Plan to the contrary, if the Committee determines that an option granted under the Plan may be subject to Section 409A of the Code or that any provision in the Plan would cause an option under the Plan to be subject to Section 409A, the Committee may amend the terms of the Plan and/or of an outstanding option granted under the Plan, or take such other action the Committee determines is necessary or appropriate, in each case, without the Participant's consent, to exempt any outstanding option or future option that may be granted under the Plan from or to allow any such options to comply with Section 409A of the Code, but only to the extent any such amendments or action by the Committee would not violate Section 409A of the Code. Notwithstanding the foregoing, the Company shall have no liability to a Participant or any other party if the option under the Plan that is intended to be exempt from or compliant with Section 409A of the Code is not so exempt or compliant or for any action taken by the Committee with respect thereto.

14. EFFECTIVE DATE OF PLAN.

The Plan will become effective immediately prior to and contingent upon the IPO Date. No Purchase Rights will be exercised unless and until the Plan has been approved by the stockholders of the Company, which approval must be within 12 months before or after the date the Plan is adopted (or if required under Section 12(a) above, materially amended) by the Board.

15. MISCELLANEOUS PROVISIONS.

(a) Proceeds from the sale of shares of Common Stock pursuant to Purchase Rights will constitute general funds of the Company.

(b) A Participant will not be deemed to be the holder of, or to have any of the rights of a holder with respect to, shares of Common Stock subject to Purchase Rights unless and until the Participant's shares of Common Stock acquired upon exercise of Purchase Rights are recorded in the books of the Company (or its transfer agent).

(c) The Plan and Offering do not constitute an employment contract. Nothing in the Plan or in the Offering will in any way alter the at will nature of a Participant's employment or amend a Participant's employment or service contract, as applicable, or be deemed to create in any way whatsoever any obligation on the part of any Participant to continue in the employ or service of the Company, a Related Corporation or an Affiliate, or on the part of the Company, a Related Corporation or an Affiliate to continue the employment or service of a Participant.

(d) The provisions of the Plan will be governed by the laws of the State of Delaware without resort to that state's conflict of laws rules.

(e) If any particular provision of the Plan is found to be invalid or otherwise unenforceable, such provision will not affect the other provisions of the Plan, but the Plan will be construed in all respects as if such invalid provision were omitted.

(f) If any provision of the Plan does not comply with Applicable Law, such provision shall be construed in such a manner as to comply with Applicable Law.

16. DEFINITIONS.

As used in the Plan, the following definitions will apply to the capitalized terms indicated below:

(a) “**423 Component**” means the part of the Plan, which excludes the Non-423 Component, pursuant to which Purchase Rights that satisfy the requirements for an Employee Stock Purchase Plan may be granted to Eligible Employees.

(b) “**Affiliate**” means any entity, other than a Related Corporation, whether now or subsequently established, which is at the time of determination, a “parent” or “subsidiary” of the Company as such terms are defined in Rule 405 promulgated under the Securities Act. The Board may determine the time or times at which “parent” or “subsidiary” status is determined within the foregoing definition.

(c) “**Applicable Law**” means the Code and any applicable U.S. and non-U.S. securities, exchange control, tax, federal, state, material local or municipal or other law, statute, constitution, principle of common law, resolution, ordinance, code, edict, decree, rule, listing rule, regulation, judicial decision, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by or under the authority of any Governmental Body (or under the authority of the New York Stock Exchange, NASDAQ Stock Market or the Financial Industry Regulatory Authority).

(d) “**Board**” means the Board of Directors of the Company.

(e) “**Capitalization Adjustment**” means any change that is made in, or other events that occur with respect to, the Common Stock subject to the Plan or subject to any Purchase Right after the date the Plan is adopted by the Board without the receipt of consideration by the Company through merger, consolidation, reorganization, recapitalization, reincorporation, stock dividend, dividend in property other than cash, large nonrecurring cash dividend, stock split, liquidating dividend, combination of shares, exchange of shares, change in corporate structure or other similar equity restructuring transaction, as that term is used in Financial Accounting Standards Board Accounting Standards Codification Topic 718 (or any successor thereto). Notwithstanding the foregoing, the conversion of any convertible securities of the Company will not be treated as a Capitalization Adjustment.

(f) “**Code**” means the U.S. Internal Revenue Code of 1986, as amended, including any applicable regulations and guidance thereunder.

(g) “**Committee**” means a committee of one or more members of the Board to whom authority has been delegated by the Board in accordance with Section 2(c).

(h) “**Common Stock**” means the common stock of the Company.

(i) “**Company**” means Artiva Biotherapeutics, Inc., a Delaware corporation.

(j) **“Contributions”** means the payroll deductions, contributions made by Participants in case payroll deductions are impermissible or problematic under Applicable Law and other additional payments specifically provided for in the Offering that a Participant contributes to fund the exercise of a Purchase Right. A Participant may make additional payments into the Participant’s account if specifically provided for in the Offering, and then only if the Participant has not already had the maximum permitted amount withheld during the Offering through payroll deductions or other contributions and, with respect to the 423 Component, to the extent permitted by Section 423.

(k) **“Corporate Transaction”** means the consummation, in a single transaction or in a series of related transactions, of any one or more of the following events:

(i) a sale or other disposition of all or substantially all, as determined by the Board in its sole discretion, of the consolidated assets of the Company and its subsidiaries;

(ii) a sale or other disposition of more than 50% of the outstanding securities of the Company;

(iii) a merger, consolidation or similar transaction following which the Company is not the surviving corporation; or

(iv) a merger, consolidation or similar transaction following which the Company is the surviving corporation but the shares of Common Stock outstanding immediately preceding the merger, consolidation or similar transaction are converted or exchanged by virtue of the merger, consolidation or similar transaction into other property, whether in the form of securities, cash or otherwise.

(l) **“Designated 423 Company”** means any Related Corporation selected by the Board as participating in the 423 Component.

(m) **“Designated Company”** means any Designated Non-423 Company or Designated 423 Company, provided, however, that at any given time, a Related Corporation participating in the 423 Component shall not be a Related Corporation participating in the Non-423 Component.

(n) **“Designated Non-423 Company”** means any Related Corporation or Affiliate selected by the Board as participating in the Non-423 Component.

(o) **“Director”** means a member of the Board.

(p) **“Eligible Employee”** means an Employee who meets the requirements set forth in the document(s) governing the Offering for eligibility to participate in the Offering, provided that such Employee also meets the requirements for eligibility to participate set forth in the Plan.

(q) **“Employee”** means any person, including an Officer or Director, who is “employed” for purposes of Section 423(b)(4) of the Code by the Company or a Related Corporation or solely with respect to the Non-423 Component, an Affiliate. However, service solely as a Director, or payment of a fee for such services, will not cause a Director to be considered an “Employee” for purposes of the Plan.

(r) “**Employee Stock Purchase Plan**” means a plan that grants Purchase Rights intended to be options issued under an “employee stock purchase plan,” as that term is defined in Section 423(b) of the Code.

(s) “**Exchange Act**” means the U.S. Securities Exchange Act of 1934, as amended and the rules and regulations promulgated thereunder.

(t) “**Fair Market Value**” means, as of any date, the value of the Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or traded on any established market, the Fair Market Value of a share of Common Stock will be, unless otherwise determined by the Board, the **closing sales price** for such stock as quoted on such exchange or market (or the exchange or market with the greatest volume of trading in the Common Stock) **on the date of determination**, as reported in such source as the Board deems reliable. Unless otherwise provided by the Board, if there is no closing sales price for the Common Stock on the date of determination, then the Fair Market Value will be the closing sales price on the last preceding date for which such quotation exists.

(ii) In the absence of such markets for the Common Stock, the Fair Market Value will be determined by the Board in good faith in compliance with Applicable Laws and regulations and, to the extent applicable as determined in the sole discretion of the Board, in a manner that complies with Sections 409A of the Code.

(iii) Notwithstanding the foregoing, for any Offering that commences on the IPO Date, the Fair Market Value of the shares of Common Stock on the Offering Date will be the price per share at which shares are first sold to the public in the Company’s initial public offering as specified in the final prospectus for that initial public offering.

(u) “**Governmental Body**” means any: (i) nation, state, commonwealth, canton, province, territory, county, municipality, district or other jurisdiction of any nature; (ii) U.S. or non-U.S. federal, state, local, municipal or other government; (iii) governmental or regulatory body, or quasi-governmental body of any nature (including any governmental division, department, administrative agency or bureau, commission, authority, instrumentality, official, ministry, fund, foundation, center, organization, unit, body or entity and any court or other tribunal, and for the avoidance of doubt, any tax authority) or other body exercising similar powers or authority; or (iv) self-regulatory organization (including the New York Stock Exchange, the NASDAQ Stock Market and the Financial Industry Regulatory Authority).

(v) “**IPO Date**” means the date of the underwriting agreement between the Company and the underwriter(s) managing the initial public offering of the Common Stock, pursuant to which the Common Stock is priced for the initial public offering.

(w) “**Non-423 Component**” means the part of the Plan, which excludes the 423 Component, pursuant to which Purchase Rights that are not intended to satisfy the requirements for an Employee Stock Purchase Plan may be granted to Eligible Employees.

(x) “**Offering**” means the grant to Eligible Employees of Purchase Rights, with the exercise of those Purchase Rights automatically occurring at the end of one or more Purchase Periods. The terms and conditions of an Offering will generally be set forth in the “**Offering Document**” approved by the Board for that Offering.

(y) “**Offering Date**” means a date selected by the Board for an Offering to commence.

(z) “**Officer**” means a person who is an officer of the Company or a Related Corporation within the meaning of Section 16 of the Exchange Act.

(aa) “**Participant**” means an Eligible Employee who holds an outstanding Purchase Right.

(bb) “**Plan**” means this Artiva Biotherapeutics, Inc. 2024 Employee Stock Purchase Plan, as amended from time to time, including both the 423 Component and the Non-423 Component.

(cc) “**Purchase Date**” means one or more dates during an Offering selected by the Board on which Purchase Rights will be exercised and on which purchases of shares of Common Stock will be carried out in accordance with such Offering.

(dd) “**Purchase Period**” means a period of time specified within an Offering, generally beginning on the Offering Date or on the first Trading Day following a Purchase Date, and ending on a Purchase Date. An Offering may consist of one or more Purchase Periods.

(ee) “**Purchase Right**” means an option to purchase shares of Common Stock granted pursuant to the Plan.

(ff) “**Related Corporation**” means any “parent corporation” or “subsidiary corporation” of the Company whether now or subsequently established, as those terms are defined in Sections 424(e) and (f), respectively, of the Code.

(gg) “**Securities Act**” means the U.S. Securities Act of 1933, as amended.

(hh) “**Tax-Related Items**” means any income tax, social insurance, payroll tax, fringe benefit tax, payment on account or other tax-related items arising out of or in relation to a Participant’s participation in the Plan, including, but not limited to, the exercise of a Purchase Right and the receipt of shares of Common Stock or the sale or other disposition of shares of Common Stock acquired under the Plan.

(ii) “**Trading Day**” means any day on which the exchange(s) or market(s) on which shares of Common Stock are listed, including but not limited to the New York Stock Exchange, Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market or any successors thereto, is open for trading.



December 14, 2020

Fred Aslan, MD

Private & Confidential

Re: Employment Offer Letter

Dear Fred,

On behalf of the Board of Directors of Artiva Biotherapeutics, Inc. (the “**Company**”), I am pleased to offer you employment under the terms set forth in this offer letter agreement (this “**Agreement**”). These employment terms are contingent upon Board approval, and will be effective as of your start date, which will be on January 1, 2021 (the “**Start Date**”).

Employment Position; Duties. You will be employed as the Company’s Chief Executive Officer (“**CEO**”) and President, initially reporting to the Company’s Board of Directors (the “**Board**”) with all authority corresponding responsibility of a CEO and President of a corporation under the laws of Delaware, subject to the overall authority of the Board and the Company’s certificate of incorporation and bylaws, regulations and other governing documents (collectively, the “**Bylaws**”). As CEO and President, you will have those duties and responsibilities as are customary for this position and as may be directed by the Company.

1. Service on the Board. You shall be appointed to the Board, and you agree to continue to serve as a director of the Company, if requested by the Board, for so long as you remain employed in the position of CEO of the Company, subject to election by the stockholders of the Company and in accordance with the Bylaws of the Company. If you cease to serve as CEO of the Company for any reason, then you agree that you will resign from your position as a member of the Board, if and as determined by the Board.

2. Compensation; Employee Benefits and Business Expenses.

(a) Base Salary. Your initial base salary will be paid at the annual rate of \$480,000 less standard payroll deductions and tax withholdings. Your base salary will be paid on the Company’s normal payroll schedule. As an exempt salaried employee, you will be required to work the Company’s normal business hours, and such additional time as appropriate for your work assignments and position. You will not be eligible for extra payment under the overtime laws.

(b) Annual Bonus. In addition to base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of forty percent (40%) of your base salary in effect during the bonus year, based on the achievement of individual and corporate performance targets and metrics to be determined and approved by the Board (the “**Annual Bonus**”). The Annual Bonus, if earned, will be paid on an annual basis, less standard payroll deductions and withholdings, after the close of the fiscal year and after determination by the Board of the level of achievement of the applicable performance targets and metrics and the level of the bonus amount. No Annual Bonus amount is guaranteed and, in addition to the other conditions for earning such Annual Bonus, you must remain the CEO of the Company (or, upon mutual agreement with the Board, employed in another position at the Company) on the scheduled Annual Bonus payment date in order to be eligible to earn any Annual Bonus.

(c) Equity Awards. Upon the earlier of (i) the effective date of a consulting agreement executed between you and the Company, or (ii) your Start Date with the Company, and subject in either case to approval by the Board, you will be eligible to receive a (x) stock option grant to purchase 1,128,603 shares of the Company’s common stock (which equals 5% of the Company’s anticipated outstanding shares on a fully diluted basis (defined as all outstanding shares of the Company’s capital stock, outstanding options and any available option pool reserve following such grant) following the closing of the second tranche of the Company’s Series A financing) (the “**Initial Option Grant**”) and (y) a stock option grant to purchase 225,720 shares of the Company’s common stock (which equals one-percent (1%) of the Company’s anticipated outstanding shares on a fully diluted basis following the closing of the second tranche of the Company’s Series A financing) (the “**Performance Grant**”). In addition to the Initial Option Grant and the Performance Grant, at the closing of future rounds of a preferred stock financing by the Company, subject to approval by the Board, you will be granted additional options to purchase additional shares of the Company’s common stock (or alternatively will be granted rights to purchase restricted shares of the Company’s common stock) to enable you to maintain a 5% equity interest in the Company (the “**Additional Awards**”, and collectively with the Initial Option Grant and the Performance Grant, the “**Initial Options**”). In addition to the Initial Options, upon consummation of an initial public offering of the Company’s Common Stock on a national securities exchange, subject to approval by the Board, you will be granted an additional option to purchase additional shares of the Company’s common stock (or alternatively will be granted restricted shares of the Company’s common stock) to enable you to maintain a 4.5% equity interest in the Company on a fully diluted basis (as defined above) (the “**IPO Grant**”; the Initial Options and the IPO Grant are collectively referred to as the “**Options**” and individually as an “**Option**”). The Options will be granted under the Company’s 2020 Equity Incentive Plan (or any equity plan as may be subsequently approved by the Board) (the “**Plan**”). The Options will have an exercise price (or purchase price in the case of restricted shares) per share equal to the fair market value (as defined in the Plan) of the Company’s common stock on the respective dates of grant. Each of the Options will be subject to vesting at a rate of one-fourth (1/4th) of the shares subject to each Option shall vest upon the one (1) year anniversary of the respective vesting commencement date set forth in the applicable grant notice for such Option and the remainder of the shares will vest in equal monthly increments over the three-year period following such one (1) year anniversary of the respective vesting commencement date for such Option, subject to your Continuous Service with the Company (as defined in the Plan). The vesting commencement date for your Initial Option Grant will be your Start Date. The vesting commencement date for your Performance Grant will be the closing date of the next preferred stock financing of the Company resulting in gross proceeds to the Company of at least \$50 million. You will be eligible to participate in and receive additional stock option or equity award grants under the Plan from time to time in the discretion of the Board, and in accordance with the terms and conditions of the Plan. If a Change in Control (as defined in the Plan) occurs and upon or within three months prior to, or 12 months after, the effective time of a Change in Control, your Continuous Service terminates due to an involuntary termination (not including death or Disability) without Cause (as defined in the Plan) or you voluntarily terminate with Good Reason (as defined in the Plan), then, as of the date of termination of your Continuous Service or the effective time of such Change in Control (whichever occurs later), the vesting and exercisability of your Options shall be accelerated in full, such that 100% of the total number of shares subject to your Options shall become immediately vested and exercisable.

(d) Unpaid 2020 Bonus. In the event that you would be entitled to receive a cash bonus from your current employer for your 2020 service to your current employer, but are deemed ineligible to receive payout of your full earned 2020 bonus from your current employer due to your resignation from your current employer in order to commence employment with the Company prior to the bonus payout, the Company agrees to cover the amount of such unpaid and earned 2020 bonus, up to a cap of \$135,000 (the “**2020 Bonus Payout**”), subject to your commencement of employment with the Company pursuant to the terms of this Offer Letter. Subject to your commencement of employment with the Company, the 2020 Bonus Payout, less standard payroll deductions and withholdings, shall be paid to you within thirty (30) days of the Company’s receipt of written notice that your current employer has approved bonus payouts for 2020 but has refused to pay out the full amount of your earned 2020 bonus in light of your resignation to join the Company.

(e) Employee Benefits. As a regular full-time employee, you will be eligible to participate in the Company’s standard employee benefits (pursuant to the terms and conditions of the benefit plans and applicable policies), as they may be terminated or changed from time to time within the Company’s discretion.

(f) Business Expenses. Your legitimate and documented business expenses will be reimbursed by the Company, as provided under our business expense reimbursement policies.

3. Compliance with Confidentiality Agreement and Company Policies. As a condition of employment, you shall sign and comply with the Company’s standard form of Employee Confidential Information and Invention Assignment Agreement (the “**Confidentiality Agreement**”). The Confidentiality Agreement shall be deemed fully incorporated into this Agreement by reference.

4. Protection of Third-Party Information and Outside Activities.

(a) Third Party Information. In your work for the Company, you will be expected not to make any unauthorized use or disclosure of any confidential information or materials, including trade secrets, of any former employer or other third party; and not to violate any lawful agreement that you may have with any third party. By signing this Agreement, you represent that you are able to perform your job duties within these guidelines, and you are not in unauthorized possession or control of any confidential documents, information, or other property of any former employer. In addition, you represent that you have disclosed to the Company in writing any agreement you may have with any third party (*e.g.*, a former employer) that may limit your ability to perform your duties to the Company or that could present a conflict of interest with the Company, including but not limited to disclosure (and a copy) of any contractual restrictions on solicitations or competitive activities.

(b) Outside Activities. During your employment by the Company, you may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of your duties hereunder or present a conflict of interest with the Company or its Affiliates. Subject to the restrictions set forth herein, and only with prior written disclosure to and written consent of the Board, you may engage in other types of business or public activities, including board service. The Board may withdraw such consent, if the Board determines, in its sole discretion, that such activities compromise or threaten to compromise the business interests of the Company or its Affiliates or conflict with your duties to the Company. The Board understands and consents to your current service on the Boards of Directors of Adavium Medical, Inc. and at Cytrellis Biosystems, Inc.

(c) Non-Competition. During your employment by the Company, you will not, without the express written consent of the Board, directly or indirectly serve as an officer, director, stockholder, employee, partner, proprietor, investor, joint venturer, associate, representative or consultant of any person or entity engaged in, or planning or preparing to engage in, business activity competitive with any line of business engaged in (or planned to be engaged in) by the Company or its Affiliates; provided, however, that you may purchase or otherwise acquire up to (but not more than) one percent (1%) of any class of securities of any enterprise (without participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange. In addition, you will be subject to certain restrictions (including restrictions continuing after your employment ends) under the terms of your Confidentiality Agreement.

5. At-Will Employment Relationship. Your employment relationship with the Company is employment at-will. Accordingly, you may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company; and the Company may terminate your employment at any time with or without Cause (as defined below) or prior notice.

6. Severance.

(a) Severance for Termination without Cause or Resignation with Good Reason. If (i) your employment is terminated by the Company without Cause (as defined below), other than due to your death or disability, or you terminate your employment for Good Reason (as defined in the Plan), and (ii) you satisfy the Release Requirement (defined below), then you will receive the Severance Payments (defined below) as your sole severance benefits, and you will not be eligible for severance benefits under any other policy, plan or agreement. Specifically, you will receive severance pay in the form of continuation of your final monthly base salary for twelve (12) months, less standard payroll deductions and tax withholdings (the “**Severance Payments**”). Subject to Section 6(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date. In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending twelve months after your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the “**COBRA Payment Period**”). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the “**Health Care Benefit Payment**”). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of

the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility.

(b) Release Requirement. To be eligible for the Severance Payments and COBRA payments pursuant to Section 7(a) above you must satisfy the following release requirement (the “**Release Requirement**”): return to the Company a signed and dated general release of all known and unknown claims in a separation agreement acceptable to the Company (the “**Release and Waiver**”) within the applicable deadline set forth therein, but in no event later than forty-five (45) calendar days following your termination date, and permit the Release and Waiver to become effective and irrevocable in accordance with its terms (such effective date of the Release and Waiver, the “**Release Effective Date**”). No Severance Payments will be paid hereunder prior to such Release Effective Date. You may be required by the separation agreement to provide reasonable transitional services as a condition of payment of Severance Payments.

(c) Definition of Cause. For purposes of this Agreement, “**Cause**” means the occurrence of any one or more of the following: (i) your conviction of, or plea of no contest, or commission of any felony or any crime involving fraud, embezzlement, dishonesty or moral turpitude; (ii) your attempted commission of, or participation in, a fraud, embezzlement or act of dishonesty (or an attempted fraud or act of dishonesty) that results in (or could result in) material harm to the Company, including but not limited to material harm to reputational interests; (iii) your violation of a fiduciary duty or duty of loyalty owed to the Company; (iv) your material breach of any contract or agreement between you and the Company, or any material Company policies that are disclosed or otherwise made available in writing to you prior to such breach; (v) persistent neglect of your job duties, which is not cured within fifteen (15) calendar days after you are provided written notice by the Company (provided, that such written notice and opportunity to cure are not required if your performance or neglect is not reasonably susceptible to being cured); or (vi) your gross misconduct or material failure to comply with a reasonable written instruction of the Company.

(d) Other. You will not be eligible for any Severance Payments or COBRA payments under any circumstances other than those described herein, including circumstances in which your employment is terminated for Cause, you terminate your employment for any reason other than Good Reason, or your employment terminates due to your death or disability. In addition, if you materially breach any continuing obligations to the Company (including, but not limited to, any material breach of this Agreement or any material breach of the Confidentiality Agreement) during the period of time that you are receiving any Severance Payments, you will forfeit your entitlement to any then unpaid Severance Payments, and the Company’s obligation to continue to pay or provide such Severance Payments and to continue providing COBRA coverage will immediately terminate as of the date of your material breach.

(e) IRS Code Section 409A. All payments provided hereunder are intended to constitute separate payments for purposes of Treasury Regulation Section 1.409A-2(b)(2). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A of the Internal Revenue Code of 1986 as amended (“**Section 409A**”), such benefits will not commence in connection with your termination of employment unless such termination also qualifies as a “separation from service” with the Company within the meaning of Treasury Regulation Section 1.409A-1(h) (without regard to any permissible alternative definition thereunder) (“**Separation from Service**”). If the Company determines that any benefits provided under this Agreement constitute “deferred

compensation” under Section 409A and you are a “specified employee” of the Company or any affiliate (or any successor entity thereto) within the meaning of Section 409A(a)(2)(B)(i) of the Code on the date of your Separation from Service, then the payment of any such benefits shall be delayed until the earlier of (i) the date that is six (6) months and one (1) day after the date of your Separation from Service, or (ii) the date of your death (such date, the “**Delayed Payment Date**”), and the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the benefit payments that otherwise would have been paid to you on or before the Delayed Payment Date, without any adjustment on account of such delay, and (B) continue the benefit payments in accordance with any applicable payment schedules set forth for the balance of the period specified herein. In addition to the above, to the extent required to comply with Section 409A and the applicable regulations and guidance issued thereunder, if the applicable deadline for you to execute (and not revoke) the applicable Release and Waiver spans two (2) calendar years, your Severance Payments shall commence to be paid in installments on the first regularly scheduled payroll date that occurs in the second calendar year after the Release Effective Date of the Release and Waiver.

7. Section 280G; Limitations on Payment.

(a) If any payment or benefit you will or may receive from the Company or otherwise (a “**280G Payment**”) would (i) any constitute a “parachute payment” within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “**Excise Tax**”), then any such 280G Payment provided pursuant to this Agreement (a “**Payment**”) shall be equal to the Reduced Amount. The “**Reduced Amount**” shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the “**Reduction Method**”) that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the “**Pro Rata Reduction Method**”).

(b) Notwithstanding any provision of Section 7(a) to the contrary, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (i) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (ii) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (iii) as a third priority, Payments that are “deferred compensation” within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(c) Unless you and the Company agree on an alternative accounting firm or law firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change of Control transaction shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control transaction, the Company shall appoint a nationally recognized accounting or law firm to make the determinations required by this Section 7. The Company shall bear all expenses with respect to the determinations by such accounting or law firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting or law firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other time as requested by you or the Company.

(d) If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of Section 7(a) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you agree to promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of Section 7(a)) so that no portion of the remaining Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of Section 7(a), you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

8. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with the Company, or the termination of your employment with the Company, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted by JAMS, Inc. (“JAMS”) or its successors by a single arbitrator. The arbitration will be held in San Diego, California, or such other location as then- agreed by the parties. ***Both you and the Company acknowledge that by agreeing to this arbitration procedure, you each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.***

Any such arbitration proceeding will be governed by JAMS’ then applicable rules and procedures for employment disputes, which will be provided to you upon request. In any such proceeding, the arbitrator shall (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator’s essential findings and conclusions and a statement of the award. You and the Company shall be entitled to all rights and remedies that either would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or you from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law, and shall pay the arbitrator’s fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

9. General. This Agreement, along with the Confidentiality Agreement, forms the complete and exclusive statement of your agreement with the Company regarding the subject matter hereof. It supersedes and replaces any other agreements or promises made to you by anyone concerning your employment compensation, benefits and/or terms, whether oral or written. This Agreement may not be amended or modified except by a written modification signed by you and a duly authorized officer of the

Company, with the exception of those changes expressly reserved to the Company’s discretion in this Agreement. This Agreement is governed by the laws of the state of California, without reference to conflicts of law principles, and it is intended to bind and inure to the benefit of and be enforceable by the Company and its successors and assigns. If any provision of this Agreement shall be held invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect the other provisions of this Agreement, and such provision will be reformed, construed and enforced so as to render it valid and enforceable consistent with the general intent of the parties insofar as possible under applicable law. With respect to the enforcement of this Agreement, no waiver of any right hereunder shall be effective unless it is in writing. Any ambiguity in this Agreement shall not be construed against either party as the drafter. This Agreement may be executed in counterparts which shall be deemed to be part of one original, and facsimile signatures shall be equivalent to original signatures.

To confirm your acceptance of this Offer letter and the terms and conditions of your employment as set forth herein, please return a signed and dated copy of this Agreement. Please let me know if you have any questions.

Sincerely,

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Brian Daniels, MD
Brian Daniels, MD
Chairman of the Board of Directors

Reviewed, Understood, and Accepted:

/s/ Fred Aslan, MD
Fred Aslan, MD

December 14, 2020
Date



April 7, 2021

Fred Aslan, MD

Re: Amendment No. 1 to Employment Offer Letter

Dear Fred,

This letter (this "**Amendment**") amends your Employment Offer Letter with Artiva Biotherapeutics, Inc. (the "**Company**"), dated December 14, 2020 (the "**Offer Letter**"), and is effective as of (and is conditioned upon) the closing of the first underwritten public offering of the equity securities of the Company pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "**Effective Date**"). All capitalized terms not otherwise defined herein shall have the same meanings as set forth in the Offer Letter.

In consideration of the mutual promises, covenants and conditions hereinafter set forth, and other consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. Amendments

- a. The first sentence of Section 2(a) of the Offer Letter is hereby amended and restated to read as follows:
"Your base salary will be paid at the annual rate of \$545,300, less standard payroll deductions and tax withholdings."
- b. The first sentence of Section 2(b) of the Offer Letter is hereby amended and restated to read as follows:
"In addition to your base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of fifty percent (50%) of your base salary in effect during the bonus year, based on the achievement of individual and corporate performance targets and metrics to be determined and approved by the Board (the "**Annual Bonus**")."
- c. Section 6 of the Offer Letter is hereby amended and restated in its entirety to read as follows:

6. Severance

(a) Severance upon Termination without Cause or Resignation with Good Reason. If (i) your employment is terminated by the Company without Cause (as defined in the Plan), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following "**Severance Benefits**": **(A)** You will receive severance pay in the form of continuation of your final monthly base salary for a period of twelve (12) months following your termination date, less standard payroll deductions and tax withholdings (the "**Severance Payments**"). Subject to Section 6(e), the Severance Payments will be paid in equal installments on the Company's regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a "catch up" payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; **(B)** In



addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending twelve (12) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the **"COBRA Payment Period"**). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the **"Health Care Benefit Payment"**). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; and (C) The vesting and exercisability of all outstanding and unvested equity awards covering the Company's common stock that are held by you as of immediately prior to the termination date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional six (6) months of service with the Company as of the termination date.

(b) Severance upon Termination without Cause or Resignation with Good Reason in Connection with a Change of Control. If (i) your employment is terminated by the Company without Cause (as defined in the Plan), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), in each case within a period commencing three (3) months before, or twelve (12) months after a Change of Control (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following **"Change of Control Severance Benefits"**: **(A)** You will receive severance pay in the form of continuation of your final monthly base salary for a period of eighteen (18) months following your termination date, less standard payroll deductions and tax withholdings (the **"Change of Control Severance Payments"**). Subject to Section 6(e), the Severance Payments will be paid in equal installments on the Company's regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a "catch up" payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; **(B)** In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending eighteen (18) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the **"COBRA Payment Period"**). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA

continuation coverage (the “**Health Care Benefit Payment**”). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; **(C)** In addition, you will receive your full target Annual Bonus for the fiscal year in which your employment terminates, payable on the first regular payroll date following the Release Effective Date, provided that the Release Requirement has been satisfied; and **(D)** Effective as of the later of the termination date or the effective date of the Change of Control, the vesting and exercisability of all outstanding and unvested equity awards covering the Company’s common stock that are held by you as of immediately prior to such date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in full. For the avoidance of doubt, in no event shall you be entitled to benefits under both Section 6(a) and this Section 6(b). If you are eligible for benefits under both Section 6(a) and this Section 6(b), you shall receive the benefits set forth in this Section 6(b) and such benefits shall be reduced by any benefits previously provided to you under Section 6(a).

(c) Release Requirement. To be eligible for the Severance Benefits and Change pursuant to Section 6(a) and the Change of Control Severance Benefits pursuant to Section 6(b) above, you must satisfy the following release requirement (the “**Release Requirement**”): You must timely execute and return to the Company a signed and dated general release of all known and unknown claims in a separation agreement acceptable to the Company (the “**Release and Waiver**”) within the applicable deadline set forth therein, but in no event later than forty-five (45) calendar days following your termination date, and permit the Release and Waiver to become effective and irrevocable in accordance with its terms (such effective date of the Release and Waiver, the “**Release Effective Date**”). No Severance Benefits or Change of Control Severance Benefits will be paid or provided hereunder prior to such Release Effective Date. You may be required by the separation agreement to provide reasonable transitional services as a condition to receiving the Severance Benefits and/or the Change of Control Severance Benefits.

(d) Other. You will not be eligible for any Severance Benefits or Change of Control Severance Benefits under any circumstances other than those described herein, including circumstances in which your employment is terminated for Cause, you terminate your employment for any reason other than Good Reason, or your employment terminates due to your death or disability. In addition, if you materially breach any continuing obligations to the Company (including, but not limited to, any material breach of this Agreement or any material breach of the Confidentiality Agreement) during the period of time that you are receiving any Severance Benefits or Change of Control Severance Benefits, as applicable, you will forfeit your entitlement to any then unpaid Severance Benefits and/or Change of Control Severance Benefits, as applicable, and the Company’s obligation to continue to pay or provide such Severance Benefits and Change of Control Severance Benefits will immediately terminate as of the date of your material breach and you will be required to return to the Company any Severance Benefits and Change of Control Severance Benefits already provided to you.



(e) **IRS Code Section 409A.** All payments provided hereunder are intended to constitute separate payments for purposes of Treasury Regulation Section 1.409A-2(b)(2). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A of the Internal Revenue Code of 1986 as amended (“**Section 409A**”), such benefits will not commence in connection with your termination of employment unless such termination also qualifies as a “separation from service” with the Company within the meaning of Treasury Regulation Section 1.409A-1(h) (without regard to any permissible alternative definition thereunder) (“**Separation from Service**”). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A and you are a “specified employee” of the Company or any affiliate (or any successor entity thereto) within the meaning of Section 409A(a)(2)(B)(i) of the Code on the date of your Separation from Service, then the payment of any such benefits shall be delayed until the earlier of (i) the date that is six (6) months and one (1) day after the date of your Separation from Service, or (ii) the date of your death (such date, the “**Delayed Payment Date**”), and the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the benefit payments that otherwise would have been paid to you on or before the Delayed Payment Date, without any adjustment on account of such delay, and (B) continue the benefit payments in accordance with any applicable payment schedules set forth for the balance of the period specified herein. In addition to the above, to the extent required to comply with Section 409A and the applicable regulations and guidance issued thereunder, if the applicable deadline for you to execute (and not revoke) the applicable Release and Waiver spans two (2) calendar years, your Severance Benefits and/or Change of Control Severance Benefits shall commence to be paid in installments on the first regularly scheduled payroll date that follows the effective date of the Release and Waiver and which also occurs during the second permitted calendar year for returning the effective Release and Waiver.

2. Miscellaneous. Except as expressly amended hereby, the Offer Letter, as amended by this Amendment, shall continue in full force and effect in accordance with its terms. This Amendment is governed by the laws of the state of California, without reference to conflicts of law principles. This Amendment may be executed in counterparts, each of which will be deemed an original, but both of which together will constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

Please acknowledge your agreement with this Amendment by signing below.

Sincerely,

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Brian Daniels

Name: Brian Daniels

Title: Chairman of the Board of Directors

Acknowledged and Agreed:

/s/ Fred Aslan, MD

Fred Aslan, MD



May 21, 2022

Thorsten Graef, MD

Private & Confidential

Re: Employment Offer Letter

Dear Thorsten,

On behalf of Artiva Biotherapeutics, Inc. (the “**Company**”), I am pleased to offer you employment under the terms set forth in this offer letter agreement (this “**Agreement**”). These employment terms are contingent upon reference check and Board approval, and will be effective as of your start date, which will be on or before June 6, 2022 (the “**Start Date**”). This offer will become void if not accepted by May 24, 2022.

1. Employment Position; Duties. You will be employed as the Company’s Chief Medical Officer (“**CMO**”). AS CMO, you will have those duties and responsibilities as are customary for this position and as may be directed by the Company. Your position will be remote, and you will work from your home office. During your employment, you will devote your full-time best efforts to the business of the Company.

2. Base Salary; Employee Benefits and Business Expenses.

(a) Base Salary. Your base salary will be paid at the annual rate of \$460,000.00, less standard payroll deductions and tax withholdings. Your base salary will be paid on the Company’s normal payroll schedule. As an exempt salaried employee, you will be required to work the Company’s normal business hours, and such additional time as appropriate for your work assignments and position. You will not be eligible for extra payment under the overtime laws.

(b) Employee Benefits. Effective the first day of the month following your Start Date, you will be eligible to participate in the Company’s benefit program. The current benefit program includes medical, dental and vision coverage. You may also elect to participate in the Company’s 401K plan. The Company does not contribute currently to the 401k plan. You will also be eligible to accrue Paid Time Off (PTO) at a rate of 9 hours per pay period, or a total of 216 hours annually. Details of the PTO policy and other benefits are provided in the Company’s Employee Handbook.

(c) Business Expenses. Your legitimate and documented business expenses will be reimbursed by the Company as provided under its business expense reimbursement policies. Your reimbursable business expenses will include reasonable costs of travel from your home office to and from San Diego as required for your role and as agreed upon between yourself and the Company.

(d) Relocation. You will initially work from your home office. In the event that you and the Company mutually agree that you will relocate to San Diego at a later date, the Company will provide you with a relocation package to assist with your relocation. The amount and terms of the relocation package will be consistent with the Company's standard relocation packages in effect at the time of your relocation.

3. Annual Bonus. In addition to base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of forty percent (40%) of your base salary in effect during the bonus year. With respect to the annual incentive compensation program, the Company's executive team will evaluate and recommend specific annual corporate and/or individual performance targets, metrics and/or management-by-objectives ("MBOs"), to be finalized and approved by the Company's Board of Directors (the "**Board**"), as part of its annual compensation review process. Annual bonuses are paid on an annual basis, after the close of the fiscal year and after determination by the Board of (a) the level of achievement of the applicable individual and corporate performance targets, metrics and/or MBOs, and (b) the amount of the annual incentive compensation earned by you (if any). No amount of annual incentive compensation is guaranteed and, in addition to the other conditions for earning such compensation, you must remain an employee of the Company in good standing on the scheduled annual incentive compensation payment date in order to earn or be eligible for any annual incentive compensation. Except as expressly provided in this Agreement or communicated to you in writing by a duly authorized officer of the Company, you will not be entitled to any other incentive compensation, commission, or other bonus programs.

4. Signing Bonus. If you accept and commence employment with the Company, the Company will provide you with a signing bonus of \$50,000 (the "**Signing Bonus**"). The Signing Bonus will be paid on the second paycheck following the Start Date, and will be subject to the usual payroll deductions and tax withholdings. The Signing Bonus is subject to the following Repayment Obligations: (i) if you voluntarily resign other than for Good Reason (as defined in the Plan), or are dismissed "for Cause," prior to the twelve-month anniversary of your Start Date, you will be obligated to repay a pro-rated amount based on the length of your service with the Company. Such repayment shall be made within 30 days following your employment termination or resignation date, as applicable.

5. Equity Award: Upon joining the Company, and subject to approval by the Company's Board of Directors, you will be eligible to receive a stock option grant to purchase 415,000 shares of the Company's common stock (the "**Options**"), pursuant to the Company's 2020 Equity Incentive Plan (the "**Plan**"). The purchase price per share of the Options will be equal to the fair market value of the Company's common stock on the date of grant. Twenty-five percent (25%) of the Options will vest on the one-year anniversary of your Start Date and the remainder will vest in equal monthly installments thereafter over the next thirty-six (36) months, subject to your Continued Service (as defined in the Plan) with the Company through each such vesting date. The terms of the Options will be governed by the Plan and the applicable option award agreement between you and the Company.

6. Compliance with Confidentiality Agreement and Company Policies. As a condition of employment, you shall sign and comply with the Company's standard form of Employee Confidential Information and Invention Assignment Agreement (the "**Confidentiality Agreement**"). The Confidentiality Agreement shall be deemed fully incorporated into this Agreement by reference.

7. COVID-19 Vaccination. The Company requires COVID-19 vaccinations as a condition of employment. If you have any questions about COVID-19 vaccinations, you should consult a trusted healthcare provider. Unless an exemption applies, the Company requires that all employees be fully vaccinated before their Start Date. An employee is considered “fully vaccinated” if at least 14 days or a period specified by the vaccine’s manufacturer have elapsed since the employee received the last dose of a vaccine that the FDA has authorized for use in the United States. FDA-authorized vaccinations include vaccinations that have been authorized pursuant to an Emergency Use Authorization. For an employee fully vaccinated outside of the United States, the vaccination must be listed for emergency use by the World Health Organization (“WHO”).

To establish that you are fully vaccinated, we require that you provide evidence of immunization by presenting a completed COVID-19 Vaccine Card or documentation from an authorized healthcare provider or pharmacy proving that you have received the COVID-19 vaccine. Please submit these documents to Brandon Saunders at _____ or via the Company’s HR portal. The Company must receive this documentation prior to your projected Start Date.

Employees who have i) a qualifying medical condition that contraindicates the vaccination, or ii) who object to being vaccinated on the basis of a sincerely held religious belief or practice, may contact Jennifer Bush at _____. The Company regards all such information as confidential.

8. Protection of Third-Party Information and Outside Activities.

(a) Third Party Information. In your work for the Company, you will be expected not to make any unauthorized use or disclosure of any confidential information or materials, including trade secrets, of any former employer or other third party; and not to violate any lawful agreement that you may have with any third party. By signing this Agreement, you represent that you are able to perform your job duties within these guidelines, and you are not in unauthorized possession or control of any confidential documents, information, or other property of any former employer. In addition, you represent that you have disclosed to the Company in writing any agreement you may have with any third party (e.g., a former employer) that may limit your ability to perform your duties to the Company or that could present a conflict of interest with the Company, including but not limited to disclosure (and a copy) of any contractual restrictions on solicitations or competitive activities.

(b) Outside Activities. During your employment by the Company, you may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of your duties hereunder or present a conflict of interest with the Company or its affiliates. You also may perform consulting services for third parties for up to four (4) hours per month, with each consulting engagement to be approved in writing by the Company’s Chief Executive Officer, and so long as the engagement would not present a conflict of interest with the Company or its affiliates or involve providing services to a competitor (in which case the engagement would need to be reviewed and approved by the Board as set forth in 8(c)). The Chief Executive Officer or Board may withdraw such consent, if they determine, in their sole discretion, that such activities compromise or threaten to compromise the business interests of the Company or its affiliates or conflict with your duties to the Company.

(c) Non-Competition. During your employment by the Company, you will not, without the express written consent of the Board, directly or indirectly serve as an officer, director, stockholder, employee, partner, proprietor, investor, joint venturer, associate, representative or consultant of any person or entity engaged in, or planning or preparing to engage in, business activity competitive with any line of business engaged in (or planned to be engaged in) by the Company or its affiliates; provided, however, that you may purchase or otherwise acquire up to (but not more than) one percent (1%) of any class of securities of any enterprise (without participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange. In addition, you will be subject to certain restrictions (including restrictions continuing after your employment ends) under the terms of your Confidentiality Agreement.

9. At-Will Employment Relationship. Your employment relationship with the Company is employment at-will. Accordingly, you may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company; and the Company may terminate your employment at any time with or without Cause (as defined below) or prior notice. In addition, the Company retains the discretion to modify your other employment terms from time to time, including but not limited to your position, duties, reporting relationship, work location, compensation (including base salary and incentive compensation terms), and benefits.

10. Severance.

(a) Pre-IPO Severance for Qualifying Termination. If (i) your employment is terminated by the Company without Cause (as defined in the Plan, or any successor or replacement plan), other than due to your death or disability, and (ii) you satisfy the Release Requirement (defined below), then you will receive severance pay in the form of continuation of your final monthly base salary for six (6) months, plus six (6) months of benefits coverage under COBRA, less standard payroll deductions and tax withholdings.

(b) Post-IPO Severance upon Termination without Cause or Resignation with Good Reason. If (i) your employment is terminated by the Company without Cause (as defined in the Plan), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following “Severance Benefits”: (A) You will receive severance pay in the form of continuation of your final monthly base salary for a period of nine (9) months following your termination date, less standard payroll deductions and tax withholdings (the “**Severance Payments**”). Subject to Section 10(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; (B) In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending nine (9) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the “**COBRA Payment Period**”). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the

Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the “**Health Care Benefit Payment**”). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; and (C) The vesting and exercisability of all outstanding and unvested equity awards covering the Company’s common stock that are held by you as of immediately prior to the termination date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional three (3) months of service with the Company as of the termination date.

(c) Post-IPO Severance upon Termination without Cause or Resignation with Good Reason in Connection with a Change of Control. If (i) your employment is terminated by the Company without Cause (as defined in the Plan), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), in each case within a period commencing three (3) months before, or twelve (12) months after a Change of Control (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following “Change of Control Severance Benefits”: (A) You will receive severance pay in the form of continuation of your final monthly base salary for a period of twelve (12) months following your termination date, less standard payroll deductions and tax withholdings (the “**Change of Control Severance Payments**”). Subject to Section 10(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; (B) In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending twelve (12) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the “**COBRA Payment Period**”). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the “**Health Care Benefit Payment**”). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law

and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; (C) In addition, you will receive your full target Annual Bonus for the fiscal year in which your employment terminates, payable on the first regular payroll date following the Release Effective Date, provided that the Release Requirement has been satisfied; and (D) Effective as of the later of the termination date or the effective date of the Change of Control, the vesting and exercisability of all outstanding and unvested equity awards covering the Company's common stock that are held by you as of immediately prior to such date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in full. For the avoidance of doubt, in no event shall you be entitled to benefits under both Section 10(b) and this Section 10(c). If you are eligible for benefits under both Section 10(b) and this Section 10(c), you shall receive the benefits set forth in this Section 10(c) and such benefits shall be reduced by any benefits previously provided to you under Section 10(b).

(d) Release Requirement. To be eligible for the Severance Benefits pursuant to Section 10(a)-(b) and the Change of Control Severance Benefits pursuant to Section 10(c) above, you must satisfy the following release requirement (the “**Release Requirement**”): You must timely execute and return to the Company a signed and dated general release of all known and unknown claims in a separation agreement acceptable to the Company (the “**Release and Waiver**”) within the applicable deadline set forth therein, but in no event later than forty-five (45) calendar days following your termination date, and permit the Release and Waiver to become effective and irrevocable in accordance with its terms (such effective date of the Release and Waiver, the “**Release Effective Date**”). No Severance Benefits or Change of Control Severance Benefits will be paid or provided hereunder prior to such Release Effective Date. You may be required by the separation agreement to provide reasonable transitional services as a condition to receiving the Severance Benefits and/or the Change of Control Severance Benefits.

(e) Other. You will not be eligible for any Severance Benefits or Change of Control Severance Benefits under any circumstances other than those described herein, including circumstances in which your employment is terminated for Cause, you terminate your employment for any reason other than Good Reason, or your employment terminates due to your death or disability. In addition, if you materially breach any continuing obligations to the Company (including, but not limited to, any material breach of this Agreement or any material breach of the Confidentiality Agreement) during the period of time that you are receiving any Severance Benefits or Change of Control Severance Benefits, as applicable, you will forfeit your entitlement to any then unpaid Severance Benefits and/or Change of Control Severance Benefits, as applicable, and the Company's obligation to continue to pay or provide such Severance Benefits and Change of Control Severance Benefits will immediately terminate as of the date of your material breach and you will be required to return to the Company any Severance Benefits and Change of Control Severance Benefits already provided to you.

(f) IRS Code Section 409A. All payments provided hereunder are intended to constitute separate payments for purposes of Treasury Regulation Section 1.409A-2(b)(2). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A of the Internal Revenue Code of 1986 as amended (“**Section 409A**”), such benefits will not commence in connection with your termination of employment unless such termination also qualifies as a “separation from service” with the Company within the meaning of Treasury Regulation Section 1.409A-1(h) (without regard to any permissible alternative definition thereunder) (“**Separation from Service**”). If the Company determines that any benefits provided under this Agreement constitute “deferred

compensation” under Section 409A and you are a “specified employee” of the Company or any affiliate (or any successor entity thereto) within the meaning of Section 409A(a)(2)(B)(i) of the Code on the date of your Separation from Service, then the payment of any such benefits shall be delayed until the earlier of (i) the date that is six (6) months and one (1) day after the date of your Separation from Service, or (ii) the date of your death (such date, the “Delayed Payment Date”), and the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the benefit payments that otherwise would have been paid to you on or before the Delayed Payment Date, without any adjustment on account of such delay, and (B) continue the benefit payments in accordance with any applicable payment schedules set forth for the balance of the period specified herein. In addition to the above, to the extent required to comply with Section 409A and the applicable regulations and guidance issued thereunder, if the applicable deadline for you to execute (and not revoke) the applicable Release and Waiver spans two (2) calendar years, your Severance Benefits and/or Change of Control Severance Benefits shall commence to be paid in installments on the first regularly scheduled payroll date that follows the effective date of the Release and Waiver and which also occurs during the second permitted calendar year for returning the effective Release and Waiver.

11. Section 280G; Limitations on Payment.

(a) If any payment or benefit you will or may receive from the Company or otherwise (a “**280G Payment**”) would (i) any constitute a “parachute payment” within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “**Excise Tax**”), then any such 280G Payment provided pursuant to this Agreement (a “**Payment**”) shall be equal to the Reduced Amount. The “**Reduced Amount**” shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the “**Reduction Method**”) that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the “**Pro Rata Reduction Method**”).

(b) Notwithstanding any provision of Section 12(a) to the contrary, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (i) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (ii) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (iii) as a third priority, Payments that are “deferred compensation” within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(c) Unless you and the Company agree on an alternative accounting firm or law firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change of Control transaction shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control transaction, the Company shall appoint a nationally recognized accounting or law firm to make the determinations required by this Section 9. The Company shall bear all expenses with respect to the determinations by such accounting or law firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting or law firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other time as requested by you or the Company.

(d) If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of Section 12(a) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you agree to promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of Section 12(a) so that no portion of the remaining Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of Section 12(a), you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

12. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with the Company, or the termination of your employment with the Company, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted by JAMS, Inc. (“JAMS”) or its successors by a single arbitrator. The arbitration will be held in San Diego, California, or such other location as then-agreed by the parties. ***Both you and the Company acknowledge that by agreeing to this arbitration procedure, you each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.***

Any such arbitration proceeding will be governed by JAMS’ then applicable rules and procedures for employment disputes, which will be provided to you upon request and also currently available at <http://www.jamsadr.com/rules-employment-arbitration/>. In any such proceeding, the arbitrator shall (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator’s essential findings and conclusions and a statement of the award. You and the Company shall be entitled to all rights and remedies that would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or you from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. You and the Company both have the right to be represented by legal counsel at any arbitration proceeding, at each party’s own expense. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law and shall pay the arbitrator’s fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

13. General. This Agreement, along with the Confidentiality Agreement, forms the complete and exclusive statement of your agreement with the Company regarding the subject matter hereof. It supersedes and replaces any other agreements or promises made to you by anyone concerning your employment compensation, benefits and/or terms, whether oral or written. This Agreement may not be amended or modified except by a written modification signed by you and a duly authorized officer of the Company, with the exception of those changes expressly reserved to the Company's discretion in this Agreement. This Agreement is governed by the laws of the state of California, without reference to conflicts of law principles, and it is intended to bind and inure to the benefit of and be enforceable by the Company and its successors and assigns. If any provision of this Agreement shall be held invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect the other provisions of this Agreement, and such provision will be reformed, construed and enforced so as to render it valid and enforceable consistent with the general intent of the parties insofar as possible under applicable law. With respect to the enforcement of this Agreement, no waiver of any right hereunder shall be effective unless it is in writing. Any ambiguity in this Agreement shall not be construed against either party as the drafter. This Agreement may be executed in counterparts which shall be deemed to be part of one original, and facsimile signatures shall be equivalent to original signatures.

This offer is subject to satisfactory proof of your identity and right to work in the United States and other applicable pre-employment screenings.

To confirm your terms of employment, please sign and date this Agreement and the Confidentiality Agreement and return the fully signed documents to Jennifer Bush at . Please let me know if you have any questions.

Sincerely,
ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan
Fred Aslan, MD
Chief Executive Officer & President

Reviewed, Understood, and Accepted:

/s/ Thorsten Graef
Thorsten Graef, MD

5/21/2022
Date



August 24th, 2020

Ms. Jennifer Bush

Private & Confidential

Re: Employment Offer Letter

Dear Jennifer,

On behalf of Artiva Biotherapeutics, Inc. (the “**Company**”), I am pleased to offer you employment under the terms set forth in this offer letter agreement (this “**Agreement**”). These employment terms will be effective as of your start date, September 16th, 2020.

Employment Position; Duties. You will be employed as the Company’s Executive Vice President, General Counsel, Corporate Secretary and Compliance Officer, reporting to the Company’s President & CEO. You will have those duties and responsibilities as are customary for these positions and as may be directed by the Company. You will work from the corporate office in San Diego and your position may require business travel. During your employment, you will devote your full-time best efforts to the business of the Company.

1. Base Salary; Employee Benefits and Business Expenses.

(a) Base Salary. Your initial base salary will be paid at the annual rate of \$350,000.00 less standard payroll deductions and tax withholdings. Your base salary will be paid on the Company’s normal payroll schedule. As an exempt salaried employee, you will be required to work the Company’s normal business hours, and such additional time as appropriate for your work assignments and position. You will not be eligible for extra payment under the overtime laws.

(b) Employee Benefits. As a regular full-time employee, you will be eligible to participate in the Company’s standard employee benefits (pursuant to the terms and conditions of the benefit plans and applicable policies), as they may be terminated or changed from time to time within the Company’s discretion.

(c) Business Expenses. Your legitimate and documented business expenses will be reimbursed by the Company as provided under its business expense reimbursement policies.

2. Annual Bonus. In addition to base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of **thirty percent (30%) of your base salary in effect during the bonus year**. With respect to the annual incentive compensation program, the Company’s executive team will evaluate and recommend specific annual individual and corporate performance

Artiva Biotherapeutics, Inc.

4747 Executive Drive #1150, San Diego CA 92121

targets, metrics and/or management-by-objectives (“**MBOs**”), to be finalized and approved by Company’s Board of Directors (the “**Board**”), as part of its annual compensation review process. Annual bonuses are paid on an annual basis, after the close of the fiscal year and after determination by the Board of (a) the level of achievement of the applicable individual and corporate performance targets, metrics and/or MBOs, and (b) the amount of the annual incentive compensation earned by you (if any). No amount of annual incentive compensation is guaranteed and, in addition to the other conditions for earning such compensation, you must remain an employee in good standing of the Company on the scheduled annual incentive compensation payment date in order to be eligible for any annual incentive compensation. This annual incentive compensation program will be the only incentive compensation, commissions, or other bonus program that will apply to you.

3. Equity Award. Upon joining the Company, and subject to approval by the Company’s Board of Directors, you will be eligible to receive a stock option to purchase 100,000 shares of common stock. The purchase price per share will be equal to the fair market value of the Company’s common stock on the date of grant. Twenty-five percent (25%) of the shares subject to the option will vest on the one year anniversary of the vesting commencement date, December 5th, 2019, and the remainder will vest in equal monthly installments thereafter over the next thirty-six (36) months, subject to your continued service with the Company. The terms of the option will be governed by the Company’s 2020 Equity Incentive Plan (the “**Plan**”) and an option award agreement between you and the Company.

4. Compliance with Confidentiality Agreement and Company Policies. As a condition of employment, you shall sign and comply with the Company’s standard form of Employee Confidential Information and Invention Assignment Agreement (the “**Confidentiality Agreement**”). The Confidentiality Agreement shall be deemed fully incorporated into this Agreement by reference. You are also required to sign and certify there is no debarment.

5. Protection of Third Party Information and Outside Activities.

(a) Third Party Information. In your work for the Company, you will be expected not to make any unauthorized use or disclosure of any confidential information or materials, including trade secrets, of any former employer or other third party; and not to violate any lawful agreement that you may have with any third party. By signing this Agreement, you represent that you are able to perform your job duties within these guidelines, and you are not in unauthorized possession or control of any confidential documents, information, or other property of any former employer. In addition, you represent that you have disclosed to the Company in writing any agreement you may have with any third party (e.g., a former employer) that may limit your ability to perform your duties to the Company or that could present a conflict of interest with the Company, including but not limited to disclosure (and a copy) of any contractual restrictions on solicitations or competitive activities.

(b) Outside Activities. During your employment by the Company, you may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of your duties hereunder or present a conflict of interest with the Company or its Affiliates (as defined in the Plan). Subject to the restrictions set forth herein, and only with prior written disclosure to and written consent of the Board, you may engage in other types of business or public activities. The Board may withdraw such consent, if the Board determines, in its sole discretion, that such activities compromise or threaten to compromise the business interests of the Company or its Affiliates or conflict with your duties to the Company.

(c) Non-Competition. During your employment by the Company, you will not, without the express written consent of the Board, directly or indirectly serve as an officer, director, stockholder, employee, partner, proprietor, investor, joint venturer, associate, representative or consultant of any person or entity engaged in, or planning or preparing to engage in, business activity competitive with any line of business engaged in (or planned to be engaged in) by the Company or its Affiliates; provided, however, that you may purchase or otherwise acquire up to (but not more than) one percent (1%) of any class of securities of any enterprise (without participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange. In addition, you will be subject to certain restrictions (including restrictions continuing after your employment ends) under the terms of your Confidentiality Agreement.

6. At-Will Employment Relationship. Your employment relationship with the Company is employment at-will. Accordingly, you may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company; and the Company may terminate your employment at any time with or without Cause (as defined below) or prior notice. In addition, the Company retains the discretion to modify your other employment terms from time to time, including but not limited to your position, duties, reporting relationship, work location, compensation (including base salary and incentive compensation terms), and benefits.

7. Severance.

(a) Severance for Qualifying Termination. If (i) your employment is terminated by the Company without Cause, other than due to your death or disability, or you terminate your employment for Good Reason (as defined in the Plan) and (ii) you satisfy the Release Requirement (defined below), then you will receive the Severance Payments (defined below) as your sole severance benefits, and you will not be eligible for severance benefits under any other policy, plan or agreement. Specifically, you will receive severance pay in the form of continuation of your final monthly base salary for six (6) months, less standard payroll deductions and tax withholdings (the “**Severance Payments**”). Subject to Section 7(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date.

(b) Release Requirement. To be eligible for the Severance Payments pursuant to Section 7(a) above you must satisfy the following release requirement (the “**Release Requirement**”): return to the Company a signed and dated general release of all known and unknown claims in a separation agreement acceptable to the Company (the “**Release and Waiver**”) within the applicable deadline set forth therein, but in no event later than forty-five (45) calendar days following your termination date, and permit the Release and Waiver to become effective and irrevocable in accordance with its terms (such effective date of the Release and Waiver, the “**Release Effective Date**”). No Severance Payments will be paid hereunder prior to such Release Effective Date. You may be required by the separation agreement to provide reasonable transitional services as a condition of payment of Severance Payments.

(c) Definition of Cause. For purposes of this Agreement, “Cause” means the occurrence of any one or more of the following: (i) your conviction of, or plea of no contest, or commission of any felony or any crime involving fraud, embezzlement, dishonesty or moral turpitude; (ii) your attempted commission of, or participation in, a fraud, embezzlement or act of dishonesty (or an attempted fraud or act of dishonesty) that results in (or could result in) material harm to the Company, including but not limited to material harm to reputational interests; (iii) your violation of a fiduciary duty or duty of loyalty owed to the Company; (iv) your material breach of any contract or agreement between you and the Company, or any material Company policies that are disclosed or otherwise made available in writing to you prior to such breach; (v) persistent neglect of your job duties, which is not cured within fifteen (15) calendar days after you are provided written notice by the Company (provided, that such written notice and opportunity to cure are not required if your performance or neglect is not reasonably susceptible to being cured); or (vi) your gross misconduct or material failure to comply with a reasonable written instruction of the Company.

(d) Other. You will not be eligible for any Severance Payments under any circumstances other than those described herein, including circumstances in which your employment is terminated for Cause, you terminate your employment for any reason, or your employment terminates due to your death or disability. In addition, if you materially breach any continuing obligations to the Company (including, but not limited to, any material breach of this Agreement or any material breach of the Confidentiality Agreement) during the period of time that you are receiving any Severance Payments, you will forfeit your entitlement to any then unpaid Severance Payments, and the Company’s obligation to continue to pay or provide such Severance Payments will immediately terminate as of the date of your material breach.

(e) IRS Code Section 409A. All payments provided hereunder are intended to constitute separate payments for purposes of Treasury Regulation Section 1.409A-2(b)(2). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A of the Internal Revenue Code of 1986 as amended (“**Section 409A**”), such benefits will not commence in connection with your termination of employment unless such termination also qualifies as a “separation from service” with the Company within the meaning of Treasury Regulation Section 1.409A-1(h) (without regard to any permissible alternative definition thereunder) (“**Separation from Service**”). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A and you are a “specified employee” of the Company or any affiliate (or any successor entity thereto) within the meaning of Section 409A(a)(2)(B)(i) of the Code on the date of your Separation from Service, then the payment of any such benefits shall be delayed until the earlier of (i) the date that is six (6) months and one (1) day after the date of your Separation from Service, or (ii) the date of your death (such date, the “**Delayed Payment Date**”), and the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the benefit payments that otherwise would have been paid to you on or before the Delayed Payment Date, without any adjustment on account of such delay, and (B) continue the benefit payments in accordance with any applicable payment schedules set forth for the balance of the period specified herein. In addition to the above, to the extent required to comply with Section 409A and the applicable regulations and guidance issued thereunder, if the applicable deadline for you to execute (and not revoke) the applicable Release and Waiver spans two (2) calendar years, your Severance Payments shall commence to be paid in installments on the first regularly scheduled payroll date that occurs in the second calendar year after the Release Effective Date of the Release and Waiver.

8. Section 280G; Limitations on Payment.

(a) If any payment or benefit you will or may receive from the Company or otherwise (a “**280G Payment**”) would (i) any constitute a “parachute payment” within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “**Excise Tax**”), then any such 280G Payment provided pursuant to this Agreement (a “**Payment**”) shall be equal to the Reduced Amount. The “**Reduced Amount**” shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the “**Reduction Method**”) that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the “**Pro Rata Reduction Method**”).

(b) Notwithstanding any provision of Section 8(a) to the contrary, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (i) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (ii) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (iii) as a third priority, Payments that are “deferred compensation” within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(c) Unless you and the Company agree on an alternative accounting firm or law firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change of Control transaction shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control transaction, the Company shall appoint a nationally recognized accounting or law firm to make the determinations required by this Section 8. The Company shall bear all expenses with respect to the determinations by such accounting or law firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting or law firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other time as requested by you or the Company.

(d) If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of Section 8(a) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you agree to promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of Section 8(a)) so that no portion of the remaining

Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of Section 8(a), you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

9. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with the Company, or the termination of your employment with the Company, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted by JAMS, Inc. (“JAMS”) or its successors by a single arbitrator. The arbitration will be held in San Diego, California, or such other location as then-agreed by the parties. ***Both you and the Company acknowledge that by agreeing to this arbitration procedure, you each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.***

Any such arbitration proceeding will be governed by JAMS’ then applicable rules and procedures for employment disputes, which will be provided to you upon request. In any such proceeding, the arbitrator shall (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator’s essential findings and conclusions and a statement of the award. You and the Company shall be entitled to all rights and remedies that either would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or you from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law and shall pay the arbitrator’s fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

10. General. This Agreement, along with the Confidentiality Agreement, forms the complete and exclusive statement of your agreement with the Company regarding the subject matter hereof. It supersedes and replaces any other agreements or promises made to you by anyone concerning your employment compensation, benefits and/or terms, whether oral or written. This Agreement may not be amended or modified except by a written modification signed by you and a duly authorized officer of the Company, with the exception of those changes expressly reserved to the Company’s discretion in this Agreement. This Agreement is governed by the laws of the state of California, without reference to conflicts of law principles, and it is intended to bind and inure to the benefit of and be enforceable by the Company and its successors and assigns. If any provision of this Agreement shall be held invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect the other provisions of this Agreement, and such provision will be reformed, construed and enforced so as to render it valid and enforceable consistent with the general intent of the parties insofar as possible under applicable law. With respect to the enforcement of this Agreement, no waiver of any right hereunder shall be effective unless it is in writing. Any ambiguity in this Agreement shall not be construed against either party as the drafter. This Agreement may be executed in counterparts which shall be deemed to be part of one original, and facsimile signatures shall be equivalent to original signatures.

To confirm your terms of continuing employment, please sign and date this Agreement and the Confidentiality Agreement and return the fully signed documents to me. Please let me know if you have any questions.

Sincerely,

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Thomas J. Farrell

Thomas J. Farrell,
President and Chief Executive Officer

Reviewed, Understood, and Accepted:

/s/ Jennifer K. Bush, J.D.

Jennifer K. Bush, J.D.

August 27, 2020

Date



April 7, 2021

Jennifer Bush

Re: Amendment No. 1 to Employment Offer Letter

Dear Jennifer,

This letter (this “**Amendment**”) amends your Employment Offer Letter with Artiva Biotherapeutics, Inc. (the “**Company**”), dated August 24, 2020 (the “**Offer Letter**”), and is effective as of (and is conditioned upon) the closing of the first underwritten public offering of the equity securities of the Company pursuant to an effective registration statement under the Securities Act of 1933, as amended (the “**Effective Date**”). All capitalized terms not otherwise defined herein shall have the same meanings as set forth in the Offer Letter.

In consideration of the mutual promises, covenants and conditions hereinafter set forth, and other consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

1. Amendments

- a. The first sentence of the Section entitled “Employment Position; Duties” is hereby amended and restated to read as follows:
“You will continue to be employed as the Company’s Executive Vice President, Chief Legal & People Officer, reporting to the Company’s President & CEO.”
- b. The first sentence of Section 1(a) of the Offer Letter is hereby amended and restated to read as follows:
“Your base salary will be paid at the annual rate of \$388,600, less standard payroll deductions and tax withholdings.”
- c. The first sentence of Section 2 of the Offer Letter is hereby amended and restated to read as follows:
“In addition to your base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of forty percent (40%) of your base salary in effect during the bonus year (the “**Annual Bonus**”).”
- d. Section 7 of the Offer Letter is hereby amended and restated in its entirety to read as follows:

7. Severance

(a) Severance upon Termination without Cause or Resignation with Good Reason. If (i) your employment is terminated by the Company without Cause (as defined in the Company’s 2020 Equity Incentive Plan, or any successor or replacement plan, the “**Plan**”), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following “**Severance Benefits**”: **(A)** You will receive severance pay in the form of continuation of your final monthly base salary for a period of nine (9) months following your termination date, less standard payroll deductions and tax withholdings (the “**Severance Payments**”). Subject to Section 7(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin



on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; **(B)** In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending nine (9) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the “**COBRA Payment Period**”). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the “**Health Care Benefit Payment**”). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; and **(C)** The vesting and exercisability of all outstanding and unvested equity awards covering the Company’s common stock that are held by you as of immediately prior to the termination date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional three (3) months of service with the Company as of the termination date.

(b) Severance upon Termination without Cause or Resignation with Good Reason in Connection with a Change of Control. If (i) your employment is terminated by the Company without Cause (as defined in the Plan), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), in each case within a period commencing three (3) months before, or twelve (12) months after a Change of Control (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following “**Change of Control Severance Benefits**”: **(A)** You will receive severance pay in the form of continuation of your final monthly base salary for a period of twelve (12) months following your termination date, less standard payroll deductions and tax withholdings (the “**Change of Control Severance Payments**”). Subject to Section 7(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; **(B)** In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending twelve (12) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage

(such period, the “**COBRA Payment Period**”). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the “**Health Care Benefit Payment**”). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; **(C)** In addition, you will receive your full target Annual Bonus for the fiscal year in which your employment terminates, payable on the first regular payroll date following the Release Effective Date, provided that the Release Requirement has been satisfied; and **(D)** Effective as of the later of the termination date or the effective date of the Change of Control, the vesting and exercisability of all outstanding and unvested equity awards covering the Company’s common stock that are held by you as of immediately prior to such date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in full. For the avoidance of doubt, in no event shall you be entitled to benefits under both Section 7(a) and this Section 7(b). If you are eligible for benefits under both Section 7(a) and this Section 7(b), you shall receive the benefits set forth in this Section 7(b) and such benefits shall be reduced by any benefits previously provided to you under Section 7(a).

(c) Release Requirement. To be eligible for the Severance Benefits and Change pursuant to Section 7(a) and the Change of Control Severance Benefits pursuant to Section 7(b) above, you must satisfy the following release requirement (the “**Release Requirement**”): You must timely execute and return to the Company a signed and dated general release of all known and unknown claims in a separation agreement acceptable to the Company (the “**Release and Waiver**”) within the applicable deadline set forth therein, but in no event later than forty-five (45) calendar days following your termination date, and permit the Release and Waiver to become effective and irrevocable in accordance with its terms (such effective date of the Release and Waiver, the “**Release Effective Date**”). No Severance Benefits or Change of Control Severance Benefits will be paid or provided hereunder prior to such Release Effective Date. You may be required by the separation agreement to provide reasonable transitional services as a condition to receiving the Severance Benefits and/or the Change of Control Severance Benefits.

(d) Other. You will not be eligible for any Severance Benefits or Change of Control Severance Benefits under any circumstances other than those described herein, including circumstances in which your employment is terminated for Cause, you terminate your employment for any reason other than Good Reason, or your employment terminates due to your death or disability. In addition, if you materially breach any continuing obligations to the Company (including, but not limited to, any material breach of this Agreement or any material breach of the Confidentiality Agreement) during the period of time that you are receiving any Severance Benefits or Change of Control Severance Benefits, as applicable, you will forfeit your entitlement to any then unpaid Severance Benefits and/or Change of Control Severance Benefits, as applicable, and the Company’s obligation to continue to pay or provide such Severance Benefits and Change of Control Severance Benefits will immediately terminate as of the date of your material breach and you will be required to return to the Company any Severance Benefits and Change of Control Severance Benefits already provided to you.



(e) **IRS Code Section 409A.** All payments provided hereunder are intended to constitute separate payments for purposes of Treasury Regulation Section 1.409A-2(b)(2). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A of the Internal Revenue Code of 1986 as amended (“**Section 409A**”), such benefits will not commence in connection with your termination of employment unless such termination also qualifies as a “separation from service” with the Company within the meaning of Treasury Regulation Section 1.409A-1(h) (without regard to any permissible alternative definition thereunder) (“**Separation from Service**”). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A and you are a “specified employee” of the Company or any affiliate (or any successor entity thereto) within the meaning of Section 409A(a)(2)(B)(i) of the Code on the date of your Separation from Service, then the payment of any such benefits shall be delayed until the earlier of (i) the date that is six (6) months and one (1) day after the date of your Separation from Service, or (ii) the date of your death (such date, the “**Delayed Payment Date**”), and the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the benefit payments that otherwise would have been paid to you on or before the Delayed Payment Date, without any adjustment on account of such delay, and (B) continue the benefit payments in accordance with any applicable payment schedules set forth for the balance of the period specified herein. In addition to the above, to the extent required to comply with Section 409A and the applicable regulations and guidance issued thereunder, if the applicable deadline for you to execute (and not revoke) the applicable Release and Waiver spans two (2) calendar years, your Severance Benefits and/or Change of Control Severance Benefits shall commence to be paid in installments on the first regularly scheduled payroll date that follows the effective date of the Release and Waiver and which also occurs during the second permitted calendar year for returning the effective Release and Waiver.

2. Miscellaneous. Except as expressly amended hereby, the Offer Letter, as amended by this Amendment, shall continue in full force and effect in accordance with its terms. This Amendment is governed by the laws of the state of California, without reference to conflicts of law principles. This Amendment may be executed in counterparts, each of which will be deemed an original, but both of which together will constitute one and the same instrument. Counterparts may be delivered via electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, Uniform Electronic Transactions Act or other applicable law) or other transmission method and any counterpart so delivered will be deemed to have been duly and validly delivered and be valid and effective for all purposes.

Please acknowledge your agreement with this Amendment by signing below.

Sincerely,

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan, MD

Name: Fred Aslan, MD

Title: Chief Executive Officer & President

Acknowledged and Agreed:

/s/ Jennifer Bush

Jennifer Bush

OFFICE LEASE

This Office Lease (the “**Lease**”), dated as of the date set forth in Section 1 of the Summary of Basic Lease Information (the “**Summary**”), below, is made by and between HSPF LA JOLLA COMMONS I INVESTORS LLC, a Delaware limited liability company (“**Landlord**”), and ARTIVA BIOTHERAPEUTICS, INC., a Delaware corporation (“**Tenant**”).

SUMMARY OF BASIC LEASE INFORMATION

	<u>TERMS OF LEASE</u>	<u>DESCRIPTION</u>																					
1. Date:	June 12, 2019																						
2. Premises																							
2.1 Building:	That certain thirteen (13) story office building containing approximately 302,262 rentable square feet of space located at 4747 Executive Drive, San Diego, California 92121.																						
2.2 Premises:	13,405 rentable square feet (11,358 usable square feet) of space located on the eleventh (11 th) floor of the Building, commonly known as Suite 1150, as further set forth in Exhibit “A” to this Lease.																						
3. Lease Term (Article 2).																							
3.1 Length of Term:	Approximately seventy-two (72) months.																						
3.2 Lease Commencement Date:	As provided in Article 2.																						
3.3 Lease Expiration Date:	The day immediately preceding the 72-month anniversary of the Lease Commencement Date; provided that if the Lease Commencement Date is not the first day of the month, then the Lease Expiration Date shall be the last day of the month in which the 72- month anniversary of the Lease Commencement Date occurs.																						
4. Base Rent (Article 3):																							
4.1 Amount Due:																							
	<table> <tr> <th><u>Period Following Lease Commencement Date</u></th><th><u>Monthly Base Rent Rate per Rentable Square Foot (rounded)</u></th><th><u>Monthly Installment of Base Rent</u></th></tr> <tr> <td>Months 1 – 12*</td><td>\$ 2.84</td><td>\$38,070.00</td></tr> <tr> <td>Months 13 – 24</td><td>\$ 2.94</td><td>\$39,403.00</td></tr> <tr> <td>Months 25 – 36</td><td>\$ 3.04</td><td>\$40,782.00</td></tr> <tr> <td>Months 37 – 48</td><td>\$ 3.15</td><td>\$42,209.00</td></tr> <tr> <td>Months 49 – 60</td><td>\$ 3.26</td><td>\$43,686.00</td></tr> <tr> <td>Months 61 – Lease Expiration Date</td><td>\$ 3.37</td><td>\$45,215.00</td></tr> </table>	<u>Period Following Lease Commencement Date</u>	<u>Monthly Base Rent Rate per Rentable Square Foot (rounded)</u>	<u>Monthly Installment of Base Rent</u>	Months 1 – 12*	\$ 2.84	\$38,070.00	Months 13 – 24	\$ 2.94	\$39,403.00	Months 25 – 36	\$ 3.04	\$40,782.00	Months 37 – 48	\$ 3.15	\$42,209.00	Months 49 – 60	\$ 3.26	\$43,686.00	Months 61 – Lease Expiration Date	\$ 3.37	\$45,215.00	
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Months 61 – Lease Expiration Date	\$ 3.37	\$45,215.00																					

* Subject to abatement as provided in Article 3 below.

Artiva Biotherapeutics, Inc.

4.2 Rent Payment Address:	HSPF La Jolla Commons I Investors LLC Dept. 34764 P.O. Box 39000 San Francisco, California 94139
5. Tenant's Share (Article 4):	4.435%
6. Permitted Use (Article 5):	General office use only consistent with a first-class office building.
7. Security (Article 21):	A Security Deposit of \$377,000, subject to Article 21.
8. Parking Pass Ratio:	As provided in Article 28.
9. Address of Tenant (Section 29.18):	4747 Executive Drive, Suite 1150 San Diego, California 92121 Attention: With a copy to: Cooley LLP 4401 Eastgate Mall San Diego, CA 92121 Attention:
10. Address of Landlord (Section 29.18):	HSPF La Jolla Commons I Investors LLC c/o Hines Interests Limited Partnership 4747 Executive Drive, Suite 270 San Diego, California 92121 Attention: Property Manager
and	HSPF La Jolla Commons I Investors LLC c/o J.P. Morgan Asset Management Global Real Assets – Real Estate Americas 2029 Century Park East, Suite 4150 Los Angeles, California 90067 Attention: Asset Manager for La Jolla Commons
and	Cozen O'Connor 1299 Ocean Avenue, Suite 900 Santa Monica, California 90401 Attention:
11. Brokers (Section 29.24):	CBRE, Inc., representing Landlord Hughes Marino, Inc., representing Tenant

ARTICLE 1

PREMISES, BUILDING, PROJECT, AND COMMON AREAS

11.1 Premises, Building, Project and Common Areas.

11.1.1 **The Premises.** Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the premises set forth in Section 2.2 of the Summary (the “**Premises**”). The conceptual outline of the Premises is set forth in Exhibit “A” attached hereto and the Premises has the number of rentable square feet set forth in Section 2.2 of the Summary. The parties hereto agree that the lease of the Premises is upon and subject to the terms, covenants and conditions herein set forth, and each party covenants as a material part of the consideration for this Lease to keep and perform each and all of such terms, covenants and conditions by it to be kept and performed and that this Lease is made upon the condition of such performance. The parties hereto hereby acknowledge that the purpose of Exhibit “A” is to show the approximate location of the Premises in the “**Building**,” as that term is defined in Section 1.1.2, below, only, and such Exhibit is not meant to constitute an agreement, representation or warranty as to the construction of the Premises, the precise area thereof or the specific location of the “**Common Areas**,” as that term is defined in Section 1.1.3, below, or the elements thereof or of the accessways to the Premises or the “**Project**,” as that term is defined in Section 1.1.2, below.

11.1.2 **The Building and The Project.** The Premises is a part of the building set forth in Section 2.1 of the Summary (the “**Building**”). The term “**Project**,” as used in this Lease, shall mean (i) the Building and the Common Areas, (ii) the land (which is improved with landscaping, parking facilities and other improvements) upon which the Building and the Common Areas are located, and (iii) at Landlord’s discretion, subject to the conditions set forth in Section 1.1.3, below, any additional real property, areas, land, buildings or other improvements added thereto outside of the Project. The Project is known as “**La Jolla Commons**” and is subject to the “**CC&R’s**,” as that term is defined in Section 5.2 below.

11.1.3 **Common Areas.** Tenant shall have the non-exclusive right to use in common with other tenants in the Project, and subject to the rules and regulations referred to in Article 5 of this Lease and the CC&R’s, those portions of the Project which are provided, from time to time, for use in common by Landlord, Tenant and any other tenants of the Project, including (i) the areas on the ground floor and all other floors of the Project devoted to non-exclusive uses such as corridors, stairways, loading and unloading areas, walkways, driveways, fire vestibules, elevators and elevator foyers, lobbies, electric and telephone closets, restrooms, mechanical areas, janitorial closets and other similar facilities for the general use of and/or benefit of all tenants and invitees of the Project, (ii) those areas of the Project devoted to mechanical and service rooms servicing more than one (1) floor or the Project as a whole and which service the Project tenants as a whole, and (iii) Project atriums and plazas, if any (such areas, together with such other portions of the Project designated by Landlord, in its reasonable discretion, including certain areas designated for the exclusive use of certain tenants, or to be shared by Landlord and certain tenants, are collectively referred to herein as the “**Common Areas**”). The manner in which the Building, Project and Common Areas are maintained and operated shall be at the sole discretion of Landlord and the use thereof shall be subject to such non-discriminatory commercially reasonable rules, regulations and restrictions as Landlord may make from time to time (including, without limitation, any rules regulations or restrictions contained in or promulgated under the CC&R’s); provided that Landlord will operate the Building in a first-class manner that is consistent with the expectations for Class “A” buildings in the Del Mar Heights and University Town Centre areas (the “**Comparable Buildings**”). Landlord reserves the right to close temporarily, make alterations or additions to, or change the location of elements of the Project and the Common Areas, provided that Landlord shall use commercially reasonable efforts not to interfere with the conduct of Tenant’s business at the Premises or access thereto.

11.2 **Condition of the Premises.** Except as specifically set forth in this Lease and in the Tenant Work Letter attached hereto as Exhibit “B” (the “**Tenant Work Letter**”), Tenant shall accept the Premises and the Building, including the base, shell, and core of (i) the Premises and (ii) the floor of the Building on which the Premises is located (collectively, the “**Base, Shell, and Core**”) in their “AS-IS” condition as of the Lease Commencement Date and Landlord shall not be obligated to provide or pay for any improvement work or services related to the improvement of the Premises. Tenant also acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty regarding the condition of the Premises, the Building or the Project or with respect to the suitability of any of the foregoing for the conduct of Tenant’s business, except as specifically set forth in this Lease and the Tenant Work Letter. The taking of possession of the Premises by Tenant shall conclusively establish that the Premises and the Building were at such time in good and sanitary order, condition and repair.

ARTICLE 2

LEASE TERM

2.1 **Initial Lease Term.** The terms and provisions of this Lease shall be effective as of the date of this Lease except for the provisions of this Lease relating to the payment of Rent. The term of this Lease (the “**Lease Term**”) shall be as set forth in Section 3.1 of the Summary, shall commence on the date (the “**Lease Commencement Date**”) that is the earlier to occur of (i) the date Tenant commences to conduct business in any portion of the Premises, and (ii) the of “Substantial Completion”, as that term is defined in this Article 2, of the Premises by Landlord, and shall terminate on the date determined in accordance with Section 3.3 of the Summary (the “**Lease Expiration Date**”) unless this Lease is sooner terminated as hereinafter provided. For purposes of this Lease, “**Substantial Completion**” of the Premises shall occur upon the completion of construction, as reasonably determined by Landlord, of the “Tenant Improvements,” as that term is defined in the Tenant Work Letter, in the Premises pursuant to the plans and drawings which are prepared and approved pursuant to the terms of the Tenant Work Letter and the issuance of a temporary certificate of occupancy or legal equivalent, with the exception of any Punchlist Items (as defined below) and any Tenant fixtures, work-stations, built-in furniture, or equipment to be installed by Tenant or under the supervision of Contractor (as defined in Section 3 of the Tenant Work Letter). “**Punchlist Items**” shall mean only commercially reasonable punchlist items, the non-completion of which does not prevent the issuance of a temporary certificate of occupancy or legal equivalent or unreasonably interfere with Tenant’s use or occupancy of the Premises, and which punchlist items shall be corrected promptly by Landlord (within thirty (30) days following Landlord’s receipt of written notice thereof from Tenant) without unreasonable interference with Tenant’s use of or access to or from the Premises. It is anticipated that the Lease Commencement Date will occur within sixteen (16) weeks after mutual execution of this Lease (such date, the “**Target Commencement Date**”), but this Lease shall not be void, voidable or subject to termination, nor shall Landlord be liable to Tenant for any loss or damage, resulting from Landlord’s inability to deliver the Premises to Tenant by any particular date, except as hereinafter provided. Notwithstanding anything to the contrary in this Lease, if the Lease Commencement Date does not occur within 60 days after the Target Commencement Date, other than due to Tenant Delay (as defined in the Tenant Work Letter) or Force Majeure, then Tenant, at its option, may terminate this Lease by written notice to Landlord given at any time after the expiration of such 60-day period but before the Lease Commencement Date actually occurs. In the event of such termination by Tenant, the first month’s Base Rent, Tenant’s Share of Direct Expenses paid by Tenant and the Security Deposit shall be fully refunded to Tenant (subject to Landlord’s right to draw upon such Security Deposit as provided in Article 21 below) and neither party shall have any further obligations hereunder. At any time during the Lease Term, Landlord may deliver to Tenant a notice in the form as set forth in Exhibit “C”, attached hereto, as a confirmation only of the information set forth therein, which Tenant shall (absent manifest error) execute and return to Landlord within five (5) business days of receipt thereof.

2.2 Option to Extend.

2.2.1 **Option Right.** Provided Tenant is not in default under this Lease (after any applicable notice and lapse of applicable cure periods) as of either the date of exercise or the commencement of the renewal term (“**Renewal Term Commencement Date**”), Tenant shall have the option to renew this Lease (“**Renewal Option**”) for the entire Premises for one period of five (5) years (“**Renewal Term**”), exercisable by giving written notice thereof (“**Renewal Notice**”) to Landlord of its exercise of the Renewal Option at least nine (9) months, but no more than twelve (12) months, prior to the expiration of the initial Term of this Lease. The rights contained in this Section 2.2 are personal to the Tenant originally named under this Lease or any Permitted Transferee (as defined below) to whom this Lease has been assigned (the “**Original Tenant**”) and may only be exercised by the Original Tenant (and not any assignee, sublessee or other transferee of the Original Tenant’s interest in this Lease), and only if the Original Tenant occupies the entire Premises without sublease or assignment to any other person or entity.

2.2.2 **Market Rent.** If the Renewal Option is properly exercised pursuant to the terms and conditions of this Section 2.2, the initial Lease Term shall be extended for the Renewal Term and all of the provisions of this Lease shall continue to apply during the Renewal Term, except that the rent payable by Tenant during the Renewal Term shall be equal to the “Market Rent”. “**Market Rent**” shall mean the applicable base rent, and all escalations, direct expenses, additional rent and other charges at which tenants, as of the commencement of the Renewal Term, are entering into leases for non-sublease space which is not encumbered by expansion rights and which is comparable in size, location and quality to the Premises in renewal transactions for a term comparable to the Renewal Term, which comparable space is located in the Building or in Comparable Buildings, with appropriate adjustments to account for the age, quality, scale, services and amenities, quality of construction and appearance, location and submarket of the applicable building, taking into consideration the value of the existing improvements in the Premises to Tenant, as compared to the value of the existing improvements in such comparable space, with such value to be based upon the age, quality and layout of the improvements and the extent to which the same could be utilized by Tenant with consideration given to the fact that the improvements existing in the Premises are specifically suitable to Tenant.

2.2.3 **Determination of Market Rent.** The rent payable for the Premises during the Renewal Term shall be adjusted to the Market Rent (as defined in Section 2.2.2) as of the Renewal Term Commencement Date. In order to determine the Market Rent for the Renewal Term, Landlord and Tenant, ten (10) days after the date on which the Renewal Notice is given by Tenant, shall commence discussions to endeavor to agree upon the Market Rent. In the event that Landlord and Tenant do not agree upon such rate within twenty (20) days after the expiration of said ten (10) day period, on the twenty-fifth (25th) day after the expiration of said ten (10) day period, Landlord and Tenant shall each simultaneously submit to the other in writing its good faith estimate of the Market Rent. If the higher of said estimates is not more than one hundred and five percent (105%) of the lower of such estimates, the Market Rent in question shall be deemed to be the average of the submitted rates. If otherwise, then the rate shall be set by arbitration to be held in the county where the Premises is located in accordance with the Real Estate Valuation Arbitration Rules of the American Arbitration Association, except that the arbitration shall be conducted by a single arbitrator who shall be selected as follows. By the date that is thirty (30) days after the simultaneous submittal by Landlord and Tenant of their respective estimates of the Market Rent (such date, the “**Outside Appointment Date**”), each shall designate a recognized real estate expert or broker who shall have generally recognized current competence in the valuation of rental properties similar to the Building and Project in the county where the Building is located. The two individuals so designated shall, within thirty (30) days after the last of them is designated, appoint a third expert or broker possessing the aforesaid qualifications to be the single arbitrator who alone shall pick (within twenty (20) days after the single arbitrator is selected) one of the two rates submitted by Landlord and Tenant, being the rate which is closer to the Market Rent as determined by the arbitrator using the definition set forth in Section 2.2.2. The parties agree to be bound by the decision of the arbitrator, which shall be final and non-appealable, and judgment upon the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. Each party shall bear the fees and expenses of the real estate expert or broker appointed by it and shall share equally the costs of the third expert or broker. If either Landlord or Tenant fails to appoint an arbitrator within fifteen (15) days after the Outside Appointment Date, then the arbitrator appointed by one of them shall reach a decision, notify Landlord and Tenant thereof and such arbitrator’s decision shall be binding upon Landlord and Tenant. If two (2) arbitrators are appointed and they fail to agree upon and appoint a third arbitrator when required hereunder, then either Landlord or Tenant shall be entitled to apply to the presiding judge of the Superior Court of the County of San Diego, California for the selection of a third arbitrator who shall then participate in such appraisal proceedings, and who shall be selected from a list of names of experts possessing the aforesaid qualifications submitted by Landlord and/or from a list of names of experts possessing the aforesaid qualifications submitted by Tenant.

ARTICLE 3

BASE RENT

Tenant shall pay, without prior notice or demand, to Landlord or Landlord's agent at the address set forth in Section 4.2 of the Summary, or, at Landlord's option, at such other place as Landlord may from time to time designate by delivering written notice to Tenant at Tenant's notice address as set forth herein, by a check or wire transfer for currency which, at the time of payment, is legal tender for private or public debts in the United States of America, base rent ("**Base Rent**") as set forth in Section 4 of the Summary, payable in equal monthly installments as set forth in Section 4 of the Summary in advance on or before the first day of each and every calendar month during the Lease Term, without any setoff or deduction whatsoever. The Base Rent for the first full month of the Lease Term shall be paid at the time of Tenant's execution of this Lease. If any Rent payment date (including the Lease Commencement Date) falls on a day of the month other than the first day of such month or if any payment of Rent is for a period which is shorter than one month, the Rent for any fractional month shall accrue on a daily basis for the period from the date such payment is due to the end of such calendar month or to the end of the Lease Term at a rate per day which is equal to 1/365 of the applicable annual Rent. All other payments or adjustments required to be made under the terms of this Lease that require proration on a time basis shall be prorated on the same basis. Notwithstanding anything to the contrary in this Lease, Tenant may at its election pay any Rent to Landlord by electronic transfer and Landlord shall provide Tenant with ACH information upon request from Tenant.

Notwithstanding the foregoing or anything to the contrary herein, provided Tenant is not then in default under this Lease (beyond the expiration of any applicable notice and cure period), Tenant shall not be obligated to pay fifty percent (50%) of the Base Rent and fifty percent (50%) of Tenant's Share of Direct Expenses due under this Lease during months one (1) through twelve (12) of the initial Lease Term; provided, however, Tenant shall be obligated upon the Lease Commencement Date, and for all periods thereafter, to pay all other Additional Rent payable under this Lease including, without limitation, parking charges.

ARTICLE 4

ADDITIONAL RENT

4.1 **General Terms.** In addition to paying the Base Rent specified in Article 3 of this Lease, Tenant shall pay "**Tenant's Share**" of the annual "**Direct Expenses**," as those terms are defined in Sections 4.2.6 and 4.2.2 of this Lease, respectively. Such payments by Tenant, together with any and all other amounts payable by Tenant to Landlord or Landlord's property manager pursuant to the terms of this Lease, are hereinafter collectively referred to as the "**Additional Rent**", and the Base Rent and the Additional Rent are herein collectively referred to as "**Rent**." All amounts due under this Article 4 as Additional Rent shall be payable for the same periods and in the same manner as the Base Rent. Without limitation on other obligations of Tenant which survive the expiration of the Lease Term, the obligations of Tenant to pay the Additional Rent provided for in this Article 4 shall survive the expiration of the Lease Term. Tenant's Share of estimated Direct Expenses for the first full month of the Lease Term, after reduction for abatement in accordance with Article 3, in the amount of \$10,791.03 shall be paid at the time of Tenant's execution of this Lease.

4.2 **Definitions of Key Terms Relating to Additional Rent.** As used in this Article 4, the following terms shall have the meanings hereinafter set forth:

4.2.1 **Intentionally Omitted.**

4.2.2 "**Direct Expenses**" shall mean "Operating Expenses" and "Tax Expenses."

4.2.3 "**Expense Year**" shall mean each calendar year in which any portion of the Lease Term falls, through and including the calendar year in which the Lease Term expires.

4.2.4 "**Operating Expenses**" shall mean all expenses, costs and amounts of every kind and nature which Landlord pays or accrues during any Expense Year because of or in connection with the ownership, management, maintenance, security, repair, replacement, restoration or operation of the Project, or any portion thereof. Without limiting the generality of the foregoing, Operating Expenses shall specifically include any and all of the following: (i) the cost of supplying all utilities to the Project, the cost of operating, repairing, maintaining, and renovating the utility, telephone, mechanical, sanitary, storm drainage, and elevator systems, and the cost of maintenance and service contracts in connection therewith; (ii) the cost of licenses, certificates, permits and inspections and the cost of contesting any governmental enactments which may affect Operating Expenses, and the costs incurred in connection with a transportation system management program or similar program; (iii) the cost of

all insurance carried by Landlord or the property manager of Landlord in connection with the Project in such amounts as Landlord may reasonably determine or as may be required by the CC&R's, any mortgagees or the lessor of any underlying or ground lease affecting the Project and/or the Building; (iv) the cost of landscaping, relamping, all supplies, tools, equipment and materials used in the operation, repair and maintenance of the Project, or any portion thereof; (v) costs incurred in connection with the parking areas servicing the Project; (vi) fees and other costs, including management fees, consulting fees, legal fees and accounting fees, of all contractors and consultants in connection with the management, operation, maintenance or security of the Project, and employer's Social Security taxes, unemployment taxes or insurance, and any other taxes which may be levied on such wages, salaries, compensation and benefits; provided, that if any employees of Landlord provide services for more than one project of Landlord, then a prorated portion of such employees' wages, benefits and taxes shall be included in Operating Expenses based on the portion of their working time devoted to the Project; (vii) payments under any equipment rental agreements and the fair rental value of any management office space, fitness center and lounge areas and the cost of furnishings in such management office space, fitness center and lounge areas; (viii) wages, salaries and other compensation and benefits, including taxes levied thereon, of all persons engaged in the operation, maintenance and security of the Project; (ix) costs under any instrument pertaining to the sharing of costs by the Project; (x) operation, repair, maintenance and replacement of all systems and equipment and components thereof of the Building; (xi) the cost of janitorial, alarm, security and other services, replacement of wall and floor coverings, ceiling tiles and fixtures in the Common Areas, maintenance and replacement of curbs and walkways, repair to roofs and re-roofing; (xii) amortization (including interest on the unamortized cost) of the cost of acquiring or the rental expense of personal property used in the maintenance, operation and repair of the Project, or any portion thereof; (xiii) the cost of capital improvements or other costs incurred in connection with the Project (A) which are reasonably intended to effect economies in the operation or maintenance of the Project, or any portion thereof, or (B) that are required under any governmental law or regulation first enforced with respect to the Project after the Lease Commencement Date; provided, however, that any capital expenditure shall be amortized with interest over the lesser of its useful life or, if applicable, the period of time in which the savings from such capital expenditure is equal to or greater than the cost of the capital expenditure, as Landlord shall reasonably determine; (xiv) costs, fees, charges or assessments imposed by, or resulting from any mandate imposed on Landlord by, any federal, state or local government for fire and police protection, trash removal, community services, or other services which do not constitute "Tax Expenses" as that term is defined in Section 4.2.5, below; and (xv) payments under any easement, license, operating agreement, declaration, restrictive covenant, or instrument pertaining to the sharing of costs by the Building, including, without limitation, all assessments levied against Landlord or the Project pursuant to the CC&R's (whether or not the same would otherwise be includable in Operating Expenses pursuant to this Section 4.2.4). Notwithstanding anything to the contrary in this Lease, in no event shall any Direct Expenses include any of the following:

(a) the original construction costs of the Premises or the Project and renovation prior to the date of this Lease and costs of correcting defects in such original construction or renovation.

(b) capital expenditures except as expressly set forth in clause (xiii) above.

(c) interest, principal or any other payments under any mortgage or similar debts of Landlord and payments under any ground lease (if any).

(d) reserves for or depreciation of the Project.

(e) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who are not assigned in whole or in part (and, if in part, then on a pro rata basis based on the amount of time devoted to the Project) to the operation, management, maintenance or repair of the Project.

(f) costs associated with the operation of the business of the partnership or entity which constitutes the Landlord, as the same are distinguished from the costs of operation of the Project (which shall specifically include, but not be limited to, accounting costs associated with the operation of the Project). Costs associated with the operation of the business of the partnership or entity which constitutes the Landlord include costs of partnership accounting and legal matters, costs of defending any lawsuits with any mortgagee (except as the actions of the Tenant may be in issue), costs of selling, syndicating, financing, mortgaging or hypothecating any of the Landlord's interest in the Project, and costs incurred in connection with any disputes between Landlord and its

employees, between Landlord and Project management, or between Landlord and other tenants or occupants, and Landlord's general corporate overhead and general and administrative expenses, except overhead costs for insurance centrally purchased benefiting the tenants of the Project through economic procurement and technology and accounting costs incurred at Landlord's corporate offices that would otherwise normally be incurred at the Project but for economies of scale that are supportably less expensive costs than if incurred on site.

(g) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis.

(h) costs of Landlord's charitable or political contributions, or of fine art maintained at the Project.

(i) costs incurred in the sale or refinancing of the Project.

(j) fees payable by Landlord for management of the Project in excess of three and one-half percent (3.5%) (the "**Management Fee Cap**") of Landlord's gross rental revenues, adjusted and grossed up to reflect a one hundred percent (100%) occupancy of the Project with all tenants paying rent, including base rent, pass-throughs, and parking fees (but excluding the cost of afterhours services or utilities) from the Project for any calendar year or portion thereof.

(k) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project pursuant to provisions in their leases that are comparable to this Article 4.

(l) advertising, marketing, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including without limitation (1) free rent and construction allowances for tenants, (2) legal and other expenses incurred in the negotiation or enforcement of leases (except where the actions of Tenant are at issue), (3) completing, fixturing, improving, renovating, painting, redecorating or other work which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work, and (4) costs in connection with services (including electricity) which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord.

(m) costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building.

(n) penalties, fines, interest or other similar charges incurred by Landlord due to (1) the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any legal requirement, (2) incurred as a result of Landlord's inability or failure to make payment of taxes and/or to file any tax returns when due or (3) the gross negligence or willful misconduct of Landlord or its employees, officers, directors, contractors or agents acting within the course of their relationship with Landlord.

(o) any costs incurred to remove, study, test or remediate Hazardous Materials that exist in or about the Project prior to the Lease Commencement Date; and costs incurred to remove, remedy, contain, or treat Hazardous Materials, which Hazardous Material is brought into the Project or onto the Project after the date hereof by Landlord or any other tenant of the Project (other than Tenant).

If Landlord is not furnishing any particular work or service (the cost of which, if performed by Landlord, would be included in Operating Expenses) to a tenant who has undertaken to perform such work or service in lieu of the performance thereof by Landlord, Operating Expenses shall be deemed to be increased by an amount equal to

the additional Operating Expenses which would reasonably have been incurred during such period by Landlord if it had at its own expense furnished such work or service to such tenant. If the Project is not at least one hundred percent (100%) occupied during all or a portion of any Expense Year, Landlord may elect to make an appropriate adjustment to the components of Operating Expenses for such year to determine the amount of Operating Expenses that would have been incurred had the Project been one hundred percent (100%) occupied; and the amount so determined shall be deemed to have been the amount of Operating Expenses for such year.

4.2.5 **Taxes.**

(a) “**Tax Expenses**” shall mean all federal, state, county, or local governmental or municipal taxes, fees, charges or other impositions of every kind and nature, whether general, special, ordinary or extraordinary, (including, without limitation, real estate taxes, general and special assessments, transit taxes, leasehold taxes or taxes based upon the receipt of rent, including gross receipts or sales taxes applicable to the receipt of rent, unless required to be paid by Tenant, personal property taxes imposed upon the fixtures, machinery, equipment, apparatus, systems and equipment, appurtenances, furniture and other personal property used in connection with the Project, or any portion thereof), which shall be paid or accrued during any Expense Year (without regard to any different fiscal year used by such governmental or municipal authority) because of or in connection with the ownership, leasing and operation of the Project, or any portion thereof.

(b) Any costs and expenses (including, without limitation, reasonable attorneys’ fees) incurred in attempting to protest, reduce or minimize Tax Expenses shall be included in Tax Expenses in the Expense Year such expenses are paid. Refunds of Tax Expenses shall be credited against Tax Expenses and refunded to Tenant regardless of when received, based on the Expense Year to which the refund is applicable, provided that in no event shall the amount to be refunded to Tenant for any such Expense Year exceed the total amount paid by Tenant as Additional Rent under this Article 4 for such Expense Year. If Tax Expenses for any period during the Lease Term or any extension thereof are increased after payment thereof for any reason, including, without limitation, error or reassessment by applicable governmental or municipal authorities, Tenant shall pay Landlord upon demand Tenant’s Share of any such increased Tax Expenses included by Landlord as Tax Expenses pursuant to the terms of this Lease. Notwithstanding anything to the contrary contained in this Section 4.2.5, there shall be excluded from Tax Expenses (i) all excess profits taxes, franchise taxes, gift taxes, capital stock taxes, inheritance and succession taxes, estate taxes, federal and state income taxes, and other taxes to the extent applicable to Landlord’s general or net income (as opposed to rents, receipts or income attributable to operations at the Project), (ii) any items included as Operating Expenses, and (iii) any items paid by Tenant under Section 4.5 of this Lease.

4.2.6 “**Tenant’s Share**” shall mean the percentage set forth in Section 5 of the Summary. Tenant’s Share was calculated by multiplying the number of rentable square feet of the Premises by 100, and dividing the product by the total rentable square feet in the Building.

4.3 **Cost Pools.** Landlord shall have the right, from time to time, to equitably allocate some or all of the Direct Expenses for the Building and Project among different portions or occupants of the Building and Project, including retail and office areas (the “**Cost Pools**”), in Landlord’s reasonable discretion. The Direct Expenses within each such Cost Pool shall be allocated and charged to the tenants within such Cost Pool in an equitable manner.

4.4 **Calculation and Payment of Additional Rent.**

4.4.1 **Statement of Actual Direct Expenses and Payment by Tenant.** Landlord shall endeavor to give to Tenant following the end of each Expense Year, a statement (the “**Statement**”) which shall state the Direct Expenses incurred or accrued for such preceding Expense Year and the amount previously paid by Tenant as Estimated Direct Expenses. Notwithstanding the foregoing, Landlord and Tenant hereby acknowledge and agree that the failure of Landlord to timely furnish the Statement for any Expense Year shall not prejudice Landlord or Tenant from enforcing its rights under this Article 4. Upon receipt of the Statement for each Expense Year commencing or ending during the Lease Term, Tenant shall pay, with its next installment of Base Rent due, the full amount of the Tenant’s Share of Direct Expenses for such Expense Year, less the amounts, if any, paid during such Expense Year as “Estimated Direct Expenses,” as that term is defined in Section 4.4.2, below. Even though the

Lease Term has expired and Tenant has vacated the Premises, when the final determination is made of Tenant's Share of Direct Expenses for the Expense Year in which this Lease terminates, if Tenant's Share of Direct Expenses for such Expense Year exceeds the amount previously paid by Tenant as Estimated Direct Expenses for such Expense Year, Tenant shall immediately pay to Landlord such amount following receipt by Tenant of the Statement setting forth such amount. In the event that a Statement shall indicate that Tenant has paid more as Estimated Direct Expenses than Tenant's Share of Direct Expenses in connection with any Expense Year (an "**Overage**"), Tenant shall receive a credit against the Rent next due under this Lease in the amount of such Overage (or, in the event that this Lease shall have terminated, Tenant shall receive a refund from Landlord in the amount of such Overage). The provisions of this Section 4.4.1 shall survive the expiration or earlier termination of the Lease Term; provided that except with respect to Direct Expenses which were in dispute or which were undeterminable, or which are levied by any governmental authority or by any public utility companies, in no event shall Landlord send to Tenant any notice of additional amounts due under this Article 4 later than twelve (12) after the end of the calendar year during which such expiration or earlier termination shall occur.

4.4.2 Statement of Estimated Direct Expenses. In addition, Landlord shall endeavor to give Tenant a yearly expense estimate statement (the "**Estimate Statement**") which shall set forth Landlord's estimate (the "**Estimate**") of what the total amount of Tenant's Share of Direct Expenses for the then-current Expense Year shall be (the "**Estimated Direct Expenses**"). The failure of Landlord to timely furnish the Estimate Statement for any Expense Year shall not preclude Landlord from enforcing its rights to collect any Estimated Direct Expenses under this Article 4, nor shall Landlord be prohibited from revising any Estimate Statement or Estimated Direct Expenses theretofore delivered to the extent necessary. Thereafter, Tenant shall pay, with its next installment of Base Rent due, a fraction of the Estimated Direct Expenses for the then-current Expense Year (reduced by any amounts already paid pursuant to the last sentence of this Section 4.4.2). Such fraction shall have as its numerator the number of months which have elapsed in such current Expense Year, including the month of such payment, and twelve (12) as its denominator. Until a new Estimate Statement is furnished (which Landlord shall have the right to deliver to Tenant at any time), Tenant shall pay monthly, with the monthly Base Rent installments, an amount equal to one-twelfth (1/12) of the total Estimated Direct Expenses set forth in the previous Estimate Statement delivered by Landlord to Tenant.

4.5 Taxes and Other Charges for Which Tenant Is Directly Responsible.

4.5.1 Tenant shall be liable for and shall pay at least ten (10) days before delinquency, taxes levied against Tenant's equipment, furniture, trade fixtures and any other personal property located in or about the Premises. If any such taxes on Tenant's equipment, furniture, fixtures and any other personal property are levied against Landlord or Landlord's property or if the assessed value of Landlord's property is increased by the inclusion therein of a value placed upon such equipment, furniture, fixtures or any other personal property and if Landlord pays the taxes based upon such increased assessment, which Landlord shall have the right to do regardless of the validity thereof but only under proper protest if requested by Tenant, Tenant shall upon demand repay to Landlord the taxes so levied against Landlord or the proportion of such taxes resulting from such increase in the assessment, as the case may be.

4.5.2 If the tenant improvements in the Premises, whether installed and/or paid for by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, are assessed for real property tax purposes at a valuation higher than the valuation at which tenant improvements conforming to Landlord's "building standard" in other space in the Building are assessed, then the Tax Expenses levied against Landlord or the property by reason of such excess assessed valuation shall be deemed to be taxes levied against personal property of Tenant and shall be governed by the provisions of Section 4.5.1, above.

4.5.3 Notwithstanding any contrary provision herein, Tenant shall pay prior to delinquency any (i) rent tax or sales tax, service tax, transfer tax or value added tax, or any other applicable tax on the rent or services herein or otherwise respecting this Lease, (ii) taxes assessed upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises or any portion of the Project, including the Project parking facility; or (iii) taxes assessed upon this transaction or any document to which Tenant is a party creating or transferring an interest or an estate in the Premises.

4.6 **Landlord's Books and Records.** Within forty-five (45) days after receipt of a Statement by Tenant, if Tenant disputes the amount of Direct Expenses set forth in the Statement, an independent certified public accountant (which accountant is a member of a nationally or regionally recognized accounting firm and which accountant shall not be compensated on a contingency fee or similar basis related to the result of such audit), designated by Tenant, may, after reasonable notice to Landlord and at reasonable times subject to Landlord's reasonable scheduling requirements, inspect Landlord's records at Landlord's offices; provided that (a) Tenant is not then in default under this Lease beyond applicable notice and cure periods, (b) Tenant has paid all amounts required to be paid under the applicable Statement, (c) Tenant may not copy any of Landlord's books or records, and (d) such inspection must be completed within ten (10) business days after Landlord's records are made available to Tenant. Tenant agrees that any records of Landlord reviewed under this Section 4.6 shall constitute confidential information of Landlord, which Tenant shall not disclose, nor permit to be disclosed by Tenant or Tenant's accountant. If, within ten (10) days after such inspection, Tenant notifies Landlord in writing that Tenant still disputes such Direct Expenses included in the Statement, then a certification as to the proper amount shall be made, at Tenant's expense, by an independent certified public accountant reasonably selected by Landlord, which certification shall be final and conclusive; provided, however, if the actual amount of Direct Expenses due for that Expense Year, as determined by such certification, is determined to have been overstated by more than five percent (5%), then Landlord shall pay the costs associated with such certification. Tenant's failure (i) to take exception to any Statement within forty-five (45) days after Tenant's receipt of such Statement or (ii) to timely complete its inspection of Landlord's records or (iii) to timely notify Landlord of any remaining dispute after such inspection shall be deemed to be Tenant's approval of such Statement and Tenant, thereafter, waives the right or ability to dispute the amounts set forth in such Statement, which Statement shall be considered final and binding.

ARTICLE 5

USE OF PREMISES

5.1 **Permitted Use.** Tenant shall use the Premises solely for general office purposes consistent with the character of the Building as a first-class office building and Tenant shall not use or permit the Premises or the Project to be used for any other purpose or purposes whatsoever without the prior written consent of Landlord, which may be withheld in Landlord's sole discretion. Except when and where Tenant's right of access is specifically excluded as the result of (i) an emergency, (ii) a legal requirement, or (iii) a specific provision set forth in this Lease, Tenant shall have the right to access the Building seven (7) days per week, twenty-four (24) hours per day during the Lease Term.

5.2 **Prohibited Uses.** The uses prohibited under this Lease shall include, without limitation, use of the Premises or a portion thereof for (i) offices of any agency or bureau of the United States or any state or political subdivision thereof; (ii) offices or agencies of any foreign governmental or political subdivision thereof; (iii) offices of any health care professionals or service organization; (iv) schools or other training facilities which are not ancillary to corporate, executive or professional office use; (v) retail or restaurant uses; (vi) communications firms such as radio and/or television stations, or (vii) an executive suites subleasing business or operation. Tenant shall not allow occupancy density of use of the Premises which is greater than 1 person per 200 rentable square feet of the Premises. Tenant further covenants and agrees that Tenant shall not use, or suffer or permit any person or persons to use, the Premises or any part thereof for any use or purpose contrary to the provisions of the Rules and Regulations set forth in Exhibit "D", attached hereto, as the same may be amended by Landlord from time to time in a commercially reasonable non-discriminatory manner, or in violation of the laws of the United States of America, the State of California, or the ordinances, regulations or requirements of the local municipal or county governing body or other lawful authorities having jurisdiction over the Project) including, without limitation, any such laws, ordinances, regulations or requirements relating to hazardous materials or substances, as those terms are defined by applicable laws now or hereafter in effect. Tenant shall not do or permit anything to be done in or about the Premises which will in any way damage the reputation of the Project or obstruct or interfere with the rights of other tenants or occupants of the Building, or injure or annoy them or use or allow the Premises to be used for any improper, unlawful or objectionable purpose, nor shall Tenant cause, maintain or permit any nuisance in, on or about the Premises. Tenant shall comply with all recorded covenants, conditions, and restrictions now or hereafter affecting the Project, including that certain Master Declaration of Covenants, Conditions and Restrictions for La Jolla Commons recorded in the Official Records of San Diego County, California as Document No. 2005-1043448 (as the same may be amended from time to time, the "CC&R's").

5.3 **Hazardous Materials; Tenant.** Except for ordinary and general office supplies typically used in the ordinary course of business within office buildings, such as copier toner, liquid paper, glue, ink and common household cleaning materials (some or all of which may constitute “Hazardous Materials” as defined in this Lease), Tenant agrees not to cause or knowingly permit any Hazardous Materials to be brought upon, stored, used, handled, generated, released or disposed of on, in, under or about the Premises, the Building, the Common Areas or any other portion of the Project by Tenant, its agents, employees, subtenants, assignees, licensees, contractors or invitees (collectively, “**Tenant’s Parties**”), without the prior written consent of Landlord, which consent Landlord may withhold in its sole and absolute discretion. Upon the expiration or earlier termination of this Lease, Tenant agrees to promptly remove from the Premises, the Building and the Project, at its sole cost and expense, any and all Hazardous Materials, including any equipment or systems containing Hazardous Materials which are installed, brought upon, stored, used, generated or released upon, in, under or about the Premises, the Building and/or the Project or any portion thereof by Tenant or any of Tenant’s Parties. To the fullest extent permitted by law, Tenant agrees to promptly indemnify, protect, defend and hold harmless Landlord and Landlord’s partners, officers, directors, employees, agents, successors and assigns (collectively, “**Landlord Indemnified Parties**”) from and against any and all claims, damages, judgments, suits, causes of action, losses, liabilities, penalties, fines, expenses and costs (including, without limitation, clean-up, removal, remediation and restoration costs, sums paid in settlement of claims, attorneys’ fees, consultant fees and expert fees and court costs) which arise or result from the presence of Hazardous Materials on, in, under or about the Premises, the Building or any other portion of the Project and which are caused or permitted by Tenant or any of Tenant’s Parties. Tenant agrees to promptly notify Landlord of any release of Hazardous Materials at the Premises, the Building or any other portion of the Project which Tenant becomes aware of during the Lease Term, whether caused by Tenant or any other persons or entities. In the event of any release of Hazardous Materials caused or permitted by Tenant or any of Tenant’s Parties, Landlord shall have the right, but not the obligation, to cause Tenant to immediately take all steps Landlord deems necessary or appropriate to remediate such release and prevent any similar future release to the satisfaction of Landlord and Landlord’s mortgagee(s). As used in this Lease, the term “**Hazardous Materials**” shall mean and include any hazardous or toxic materials, substances or wastes as now or hereafter designated under any law, statute, ordinance, rule, regulation, order or ruling of any agency of the State in which the Building is located, the United States Government or any local governmental authority, including, without limitation, asbestos, petroleum, petroleum hydrocarbons and petroleum based products, urea formaldehyde foam insulation, polychlorinated biphenyls (“**PCBs**”), and freon and other chlorofluorocarbons. The provisions of this Section 5.3 will survive the expiration or earlier termination of this Lease.

ARTICLE 6

SERVICES AND UTILITIES

6.1 **Standard Tenant Services.** Landlord (or Landlord’s property manager) shall provide the following services on all days (unless otherwise stated below) during the Lease Term.

6.1.1 Subject to limitations imposed by all governmental rules, regulations and guidelines applicable thereto, Landlord shall provide heating and air conditioning (“**HVAC**”) when necessary for normal comfort for normal office use in the Premises from 8:00 A.M. to 6:00 P.M. Monday through Friday, and on Saturdays from 9:00 A.M. to 1:00 P.M. (collectively, the “**Building Hours**”), except for the date of observation of New Year’s Day, Presidents’ Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day and, at Landlord’s discretion, other nationally recognized holidays (collectively, the “**Holidays**”).

6.1.2 Landlord shall provide adequate electrical wiring and facilities for normal general office use and electricity at levels consistent with normal general office use, as reasonably determined by Landlord. Tenant shall bear the cost of replacement of lamps, starters and ballasts for non-Building standard lighting fixtures within the Premises.

6.1.3 Landlord shall provide city water from the regular Building outlets for drinking, lavatory and toilet purposes and for any business office type kitchens in the Premises and the Common Areas.

6.1.4 Landlord shall provide janitorial services to the Premises and the Common Areas, except on the date of observation of the Holidays, and window washing services in a manner consistent with other first- class buildings in the vicinity of the Building.

6.1.5 Landlord shall provide nonexclusive, non-attended automatic passenger elevator service during the Building Hours, except on Holidays, and shall have one elevator available at all other times.

6.1.6 Landlord shall provide nonexclusive service elevator use subject to scheduling by

Landlord.

6.1.7 Landlord shall provide commercially reasonable access control services for the Building.

Tenant shall cooperate fully with Landlord at all times and abide by all regulations and requirements that Landlord may reasonably prescribe for the proper functioning and protection of the HVAC, electrical, mechanical and plumbing systems.

6.2 **Overstandard Tenant Use.** Tenant shall not, without Landlord's prior written consent, use heat- generating machines, machines other than normal fractional horsepower office machines, or equipment or lighting other than Building standard lights in the Premises, which may affect the temperature otherwise maintained by the air conditioning system or increase the water normally furnished for the Premises by Landlord (or Landlord's property manager) pursuant to the terms of Section 6.1 of this Lease. If such consent is given, Landlord (or Landlord's property manager) shall have the right to install supplementary air conditioning units or other facilities in the Premises, including supplementary or additional metering devices, and the cost thereof, including the cost of installation, operation and maintenance, increased wear and tear on existing equipment and other similar charges, shall be paid by Tenant to Landlord (or Landlord's property manager) upon billing by Landlord (or Landlord's property manager). If Tenant uses water, electricity, heat or air conditioning in excess of that supplied by Landlord (or Landlord's property manager) pursuant to Section 6.1 of this Lease, or if Tenant shall install and/or operate in the Premises any equipment which shall have an electrical consumption greater than that of normal general office equipment, or which, consistent with the practices of the landlords of comparable first class office buildings located in the general vicinity of the Building, are considered to be high electricity consumption equipment, Tenant shall pay to Landlord (or Landlord's property manager), upon billing, the cost of such excess consumption and the cost of the installation, operation, and maintenance of equipment which is installed in order to supply such excess consumption, and the cost of the increased wear and tear on existing equipment caused by such excess consumption; and Landlord (or Landlord's property manager) may install devices to separately meter any increased use and in such event Tenant shall pay the increased cost directly to Landlord (or Landlord's property manager), upon billing, at the rates charged by the public utility company furnishing the same, including the cost of such additional metering devices. Tenant's use of electricity shall never exceed the capacity of the feeders to the Project or the risers or wiring installation, and subject to the terms of Section 29.32, below, Tenant shall not install or use or permit the installation or use of any computer or electronic data processing equipment in the Premises, without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed. If Tenant desires to use heat, ventilation or air conditioning during hours other than those for which Landlord (or Landlord's property manager) is obligated to supply such utilities pursuant to the terms of Section 6.1 of this Lease ("**After Hours HVAC**"), Tenant shall give Landlord such prior notice, if any, as Landlord shall from time to time establish as appropriate, of Tenant's desired use in order to supply such After Hours HVAC, and Landlord (or Landlord's property manager) shall supply such After Hours HVAC to Tenant on an hourly basis and (subject to a four (4) hour minimum on Sundays) at such hourly cost to Tenant (which shall be treated as Additional Rent) as Landlord shall from time to time establish (the "**After Hours HVAC Rate**"). If required by law, Landlord shall have the right to require Tenant to provide Landlord with copies of bills from electricity, natural gas or similar energy providers (collectively, "**Energy Providers**") Tenant receives from Energy Providers relating to Tenant's energy use at the Premises ("**Energy Bills**") within ten (10) days after Landlord's written request. In addition, to the extent required by law, Tenant hereby authorizes Landlord to obtain copies of the Energy Bills directly from the Energy Provider(s), and Tenant hereby authorizes each Energy Provider to provide Energy Bills and related usage information directly to Landlord without Tenant's consent.

6.3 **Interruption of Use.** Tenant agrees that Landlord (or Landlord's property manager) shall not be liable for damages, by abatement of Rent or otherwise, for failure to furnish or delay in furnishing any service (including telephone and telecommunication services), or for any diminution in the quality or quantity thereof, when such failure or delay or diminution is occasioned, in whole or in part, by breakage, repairs, replacements, or improvements, by any strike, lockout or other labor trouble, by inability to secure electricity, gas, water, or other fuel at the Building or Project after reasonable effort to do so, by any riot or other dangerous condition, emergency, accident or casualty whatsoever, by act or default of Tenant or other parties, or by any other cause; and such failures or delays or diminution shall never be deemed to constitute an eviction or disturbance of Tenant's use and possession of the Premises or relieve Tenant from paying Rent or performing any of its obligations under this Lease. Furthermore, Landlord (or Landlord's property manager) shall not be liable under any circumstances for a loss of, or injury to, property or for injury to, or interference with, Tenant's business, including, without limitation, loss of profits, however occurring, through or in connection with or incidental to a failure to furnish any of the services or utilities as set forth in this Article 6. Landlord (or Landlord's property manager) may comply with voluntary controls or guidelines promulgated by any governmental entity relating to the use or conservation of energy, water, gas, light or electricity or the reduction of automobile or other emissions without creating any liability of Landlord (or Landlord's property manager) to Tenant under this Lease, provided that the Premises are not thereby rendered untenantable.

6.4 **Rent Abatement.** If Landlord fails to perform the obligations required of Landlord under this Lease and such failure causes all or a portion of the Premises to be untenantable, or if the negligence or willful misconduct of Landlord causes all or a portion of the Premises to become untenantable, Tenant shall give Landlord notice (the "**Initial Notice**"), specifying such failure to perform by Landlord or such negligence or willful misconduct (referred to herein as a "**Landlord Failure**"). If Landlord has not cured such Landlord Failure within five (5) business days after the receipt of the Initial Notice (the "**Eligibility Period**"), Tenant may deliver an additional notice to Landlord (the "**Additional Notice**"), specifying such Landlord Failure and Tenant's intention to abate the payment of Rent under this Lease. If Landlord does not cure such Landlord Failure within three (3) business days of receipt of the Additional Notice, Tenant may, upon written notice to Landlord, immediately abate Rent payable under this Lease for that portion of the Premises rendered untenantable and not used by Tenant, for the period beginning on the date five (5) business days after the Initial Notice to the earlier of the date Landlord cures such Landlord Failure or the date Tenant recommences the use of such portion of the Premises. Such right to abate Rent shall be Tenant's sole and exclusive remedy at law or in equity for a Landlord Failure. Without limiting the generality of the foregoing, Tenant hereby waives the provisions of California Civil Code Section 1932(1) or any other applicable existing or future law permitting the termination of this Lease due to a service or utility interruption or failure. Except as provided in this Section 6.4, nothing contained herein shall be interpreted to mean that Tenant is excused from paying Rent due hereunder.

ARTICLE 7

REPAIRS

Tenant shall, at Tenant's own expense, pursuant to the terms of this Lease, including without limitation Article 8 hereof, keep the Premises, including all improvements, fixtures and furnishings therein, in good order, repair and condition at all times during the Lease Term. In addition, Tenant shall, at Tenant's own expense, but under the supervision and subject to the prior approval of Landlord, and within any reasonable period of time specified by Landlord, pursuant to the terms of this Lease, including without limitation Article 8 hereof, promptly and adequately repair all damage to the Premises and replace or repair all damaged, broken, or worn fixtures and appurtenances, except for damage caused by ordinary wear and tear or beyond the reasonable control of Tenant; provided however, that, at Landlord's option, or if Tenant fails to make such repairs, Landlord (or Landlord's property manager) may, but need not, make such repairs and replacements, and Tenant shall pay Landlord (or Landlord's property manager) the cost thereof, including a percentage of the cost thereof (to be uniformly established for the Building and/or the Project) sufficient to reimburse Landlord (or Landlord's property manager's) for all overhead, general conditions, fees and other costs or expenses arising from Landlord's (or Landlord's property manager) involvement with such repairs and replacements forthwith upon being billed for same. Landlord may, but shall not be required to, enter the Premises at all reasonable times to make such repairs, alterations, improvements or additions to the Premises or to the Project or to any equipment located in the Project as Landlord shall desire or deem necessary or as Landlord may be required to do by governmental or quasi-governmental authority or court order or decree. Tenant hereby waives any and all rights under and benefits of subsection 1 of Section 1932 and Sections 1941 and 1942 of the California Civil Code or under any similar law, statute, or ordinance now or hereafter in effect.

ARTICLE 8

ADDITIONS AND ALTERATIONS

8.1 **Landlord's Consent to Alterations.** Tenant may not make any improvements, alterations, additions or changes to the Premises or any mechanical, plumbing or HVAC facilities or systems pertaining to the Premises (collectively, the "**Alterations**") without first procuring the prior written consent of Landlord to such Alterations, which consent shall be requested by Tenant not less than thirty (30) days prior to the commencement thereof, and which consent shall not be unreasonably withheld by Landlord, provided it shall be deemed reasonable for Landlord to withhold its consent to any Alteration which adversely affects the structural portions or the systems or equipment of the Building or is visible from the exterior of the Building. The construction of the initial improvements to the Premises shall be governed by the terms of the Tenant Work Letter and not the terms of this Article 8.

8.2 **Manner of Construction.** Landlord may impose, as a condition of its consent to any and all Alterations or repairs of the Premises or about the Premises, such commercially reasonable requirements as Landlord may deem desirable, including, but not limited to, the requirement that Tenant utilize for such purposes only contractors, subcontractors, materials, mechanics and materialmen selected by Tenant from a list provided and approved by Landlord, the requirement that upon Landlord's request, Tenant shall, at Tenant's expense, remove such Alterations upon the expiration or any early termination of the Lease Term, and the requirement that all Alterations conform in terms of quality and style to the Building's standards established by Landlord. If such Alterations will involve the use of or disturb hazardous materials or substances existing in the Premises, Tenant shall comply with Landlord's rules and regulations concerning such hazardous materials or substances. Landlord's approval of the plans, specifications and working drawings for Tenant's Alterations shall create no responsibility or liability on the part of Landlord for their completeness, design sufficiency, or compliance with all Laws. Tenant shall construct such Alterations and perform such repairs in a good and workmanlike manner, in conformance with any and all applicable federal, state, county or municipal laws, rules and regulations and pursuant to a valid building permit, issued by the City of San Diego, all in conformance with Landlord's construction rules and regulations and the plans and specifications previously approved by Landlord. In the event Tenant performs any Alterations in the Premises which require or give rise to governmentally required changes to the "Base, Shell and Core," as that term is defined in Exhibit B, then Landlord (or Landlord's property manager) shall, at Tenant's expense, make such changes to the Base, Shell and Core. In performing the work of any such Alterations, Tenant shall have the work performed in such manner so as not to obstruct access to the Project or any portion thereof, by any other tenant of the Project, and so as not to obstruct the business of Landlord or other tenants in the Project. Tenant shall not use (and upon notice from Landlord shall cease using) contractors, services, workmen, labor, materials or equipment that, in Landlord's reasonable judgment, would disturb labor harmony with the workforce or trades engaged in performing other work, labor or services in or about the Building or the Common Areas. In addition to Tenant's obligations under Article 9 of this Lease, upon completion of any Alterations, Tenant agrees to cause a Notice of Completion to be recorded in the office of the Recorder of the County of San Diego in accordance with Section 8182 of the California Civil Code or any successor statute and furnish a copy thereof to Landlord upon recordation, and timely give all notices required pursuant to Section 8190 of the California Civil Code or any successor statute (failing which, Landlord may itself execute and file such Notice of Completion and give such notices on behalf of Tenant as Tenant's agent for such purpose), and Tenant shall deliver to the Project management office, if applicable to the particular Alteration, the "as built" drawings of the Alterations (in CAD and pdf formats) as well as all permits, approvals and other documents issued by any governmental agency in connection with the Alterations.

8.3 **Payment for Improvements.** If payment is made directly to contractors, Tenant shall comply with Landlord's requirements for final lien releases and waivers in connection with Tenant's payment for work to contractors. Whether or not Tenant orders any work directly from Landlord (or Landlord's property manager), Tenant shall pay to Landlord or the entity designated by Landlord to manage or supervise the Tenant's work (Landlord or such entity, as applicable, the "**Construction Manager**") a percentage of the cost of such work sufficient to compensate the Construction Manager for all overhead, general conditions, fees and other costs and

expenses arising from the Construction Manager's involvement with such work, which percentage shall be determined by the Construction Manager from time to time; such percentage is currently fifteen percent (15%) of the cost of such work. The obligations of Landlord with respect to the supervision of and involvement in such work, in any work described in Exhibit B, and the right to receive any fees payable hereunder or pursuant to Exhibit B in connection therewith, is hereby assigned to the Construction Manager. As of the date hereof, Landlord designates Landlord's property manager as the Construction Manager for purposes hereof.

8.4 **Construction Insurance.** In addition to the requirements of Article 10 of this Lease, in the event that Tenant makes any Alterations, prior to the commencement of such Alterations, Tenant shall provide Landlord with evidence that Tenant carries "**Builder's All Risk**" insurance in an amount approved by Landlord covering the construction of such Alterations, and such other insurance as Landlord may reasonably require, it being understood and agreed that all of such Alterations shall be insured by Tenant pursuant to Article 10 of this Lease immediately upon completion thereof. In addition, Landlord may, in its discretion, require Tenant to obtain a lien and completion bond or some alternate form of security satisfactory to Landlord in an amount sufficient to ensure the lien-free completion of such Alterations and naming Landlord as a co-obligee.

8.5 **Landlord's Property.** All Alterations, improvements, fixtures, equipment and/or appurtenances which may be installed or placed in or about the Premises, from time to time, shall be at the sole cost of Tenant and shall be and become the property of Landlord. Landlord may, however, by written notice to Tenant prior to the expiration or earlier termination of this Lease, require Tenant, at Tenant's expense, to remove any Tenant Improvements or Alterations which are not customary general office improvements, and repair any damage to the Premises and Building caused by such removal and return the affected portion of the Premises to a building standard tenant improved condition as determined by Landlord. If Tenant fails to complete such removal and/or to repair any damage caused by the removal of any Alterations or Tenant Improvements in the Premises, and return the affected portion of the Premises to a building standard tenant improved condition as determined by Landlord, then at Landlord's option, either (A) Tenant shall be deemed to be holding over in the Premises and Rent shall continue to accrue in accordance with the terms of Article 16, below, until such work shall be completed, or (B) Landlord may do so and may charge the cost thereof to Tenant. Tenant hereby protects, defends, indemnifies and holds Landlord harmless from any liability, cost, obligation, expense or claim of lien in any manner relating to the installation, placement, removal or financing of any such Alterations, improvements, fixtures and/or equipment in, on or about the Premises, which obligations of Tenant shall survive the expiration or earlier termination of this Lease.

8.6 **Cosmetic Alterations.** Tenant may, at its election and without first obtaining Landlord's consent but upon ten (10) days prior notice to Landlord, make any Non-Material Alterations (as defined below) subject to the following: (a) Tenant complies with all applicable laws including without limitation use of a licensed contractor (if required by applicable laws), and Tenant obtains all applicable permits; (b) Tenant provides Landlord copies of all contracts, agreements, receipts, and all other related documentation immediately upon request; and (c) Tenant furnishes Landlord with a complete set of architectural plans and construction documents (if applicable), including all finish schedules and specifications, with respect to such Non-Material Alterations. The sole cost and expense of any space plans and architectural fees shall be paid 100% by Tenant and said architect shall be hired directly by Tenant. "**Non-Material Alterations**" means alterations that (i) are interior, cosmetic and non-structural, (ii) do not exceed the cost of Fifty Thousand Dollars (\$50,000) in the aggregate in any 12-month period, (iii) do not require any application to a political jurisdiction for rezoning, general plan amendment, variance, or conditional use permit, and (iv) do not affect the Building's HVAC, MEP or similar systems, the entryways (if visible from any Common Areas) or elevators, the structural integrity of the Building or the exterior appearance of the Project.

ARTICLE 9

COVENANT AGAINST LIENS

Tenant shall keep the Project and Premises free from any liens or encumbrances arising out of the work performed, materials furnished or obligations incurred by or on behalf of Tenant, and shall protect, defend, indemnify and hold Landlord harmless from and against any claims, liabilities, judgments or costs (including, without limitation, reasonable attorneys' fees and costs) arising out of same or in connection therewith. Tenant shall give Landlord notice at least twenty (20) days prior to the commencement of any such work on the Premises (or such additional time as may be necessary under applicable laws) to afford Landlord the opportunity of posting and

recording appropriate notices of non-responsibility. Tenant shall remove any such lien or encumbrance by bond or otherwise within five (5) days after notice by Landlord, and if Tenant shall fail to do so, Landlord may pay the amount necessary to remove such lien or encumbrance, without being responsible for investigating the validity thereof. The amount so paid shall be deemed Additional Rent under this Lease payable upon demand, without limitation as to other remedies available to Landlord under this Lease. Nothing contained in this Lease shall authorize Tenant to do any act which shall subject Landlord's title to the Building or Premises to any liens or encumbrances whether claimed by operation of law or express or implied contract. Any claim to a lien or encumbrance upon the Building or Premises arising in connection with any such work or respecting the Premises not performed by or at the request of Landlord shall be null and void, or at Landlord's option shall attach only against Tenant's interest in the Premises and shall in all respects be subordinate to Landlord's title to the Project, Building and Premises.

ARTICLE 10

INSURANCE

10.1 Indemnification and Waiver. Tenant hereby assumes all risk of damage to property or injury to persons in, upon or about the Premises from any cause whatsoever and agrees that Landlord, its partners, subpartners and their respective officers, agents, servants, and employees (collectively, "**Landlord Parties**") shall not be liable for, and are hereby released from any responsibility for, any damage either to person or property or resulting from the loss of use thereof, which damage is sustained by Tenant or by other persons claiming through Tenant. Tenant shall indemnify, defend, protect, and hold harmless the Landlord Parties from any and all loss, cost, damage, expense and liability (including without limitation court costs and reasonable attorneys' fees) incurred in connection with or arising from any cause in, on or about the Premises, any violation of any of the requirements, ordinances, statutes, regulations or other laws, including, without limitation, any environmental laws, any acts, omissions or negligence of Tenant or of any person claiming by, through or under Tenant, or any Tenant Parties, in, on or about the Project or any breach of the terms of this Lease by Tenant, either prior to, during, or after the expiration of the Lease Term, provided that the terms of the foregoing indemnity shall not apply to the gross negligence or willful misconduct of the Landlord Parties. Should Landlord be named as a defendant in any suit brought against Tenant in connection with or arising out of Tenant's occupancy of the Premises, Tenant shall pay to Landlord its costs and expenses incurred in such suit, including without limitation, its actual professional fees such as appraisers', accountants' and attorneys' fees. Further, Tenant's agreement to indemnify Landlord pursuant to this Section 10.1 is not intended to and shall not relieve any insurance carrier of its obligations under policies required to be carried by Tenant pursuant to the provisions of this Lease, to the extent such policies cover the matters subject to Tenant's indemnification obligations; nor shall they supersede any inconsistent agreement of the parties set forth in any other provision of this Lease. The provisions of this Section 10.1 shall survive the expiration or sooner termination of this Lease with respect to any claims or liability arising in connection with any event occurring prior to such expiration or termination.

10.2 Tenant's Compliance with Landlord's Fire and Casualty Insurance. Tenant shall, at Tenant's expense, comply with all customary insurance company requirements pertaining to the use of the Premises. If Tenant's conduct or use of the Premises causes any increase in the premium for such insurance policies then Tenant shall reimburse Landlord for any such increase. Tenant, at Tenant's expense, shall comply with all rules, orders, regulations or requirements of the American Insurance Association (formerly the National Board of Fire Underwriters) and with any similar body.

10.3 Tenant's Insurance. Tenant shall maintain the following coverages in the following amounts.

10.3.1 Commercial General Liability ("**CGL**") Insurance (including contractual and personal injury liability coverages) in an amount not less than \$5,000,000 each occurrence combined single limit for bodily injury and property damage. The use of CGL and umbrella liability insurance (on a follow-form basis) to attain the required limits is acceptable.

10.3.2 Special Form (Causes of Loss) Property Insurance covering (i) all office furniture, business and trade fixtures, office equipment, free-standing cabinet work, movable partitions, merchandise and all other items of Tenant's property on the Premises installed by, for, or at the expense of Tenant, (ii) the "Tenant

Improvements,” as that term is defined in the Tenant Work Letter, and any other improvements which exist in the Premises as of the Lease Commencement Date (excluding the Base, Shell and Core) (the “**Original Improvements**”), and (iii) all Alterations. Such insurance shall be for the full replacement cost (subject to reasonable deductible amounts) new without deduction for depreciation of the covered items and in amounts that meet any co-insurance clauses of the policies of insurance and shall include coverage for damage or other loss caused by fire or other peril including, but not limited to, vandalism and malicious mischief, theft, water damage of any type, including sprinkler leakage, bursting or stoppage of pipes, and explosion, and providing business interruption coverage for a period of one year.

10.3.3 Worker’s Compensation and Employer’s Liability or other similar insurance pursuant to all applicable state and local statutes and regulations.

10.4 **Form of Policies.** The minimum limits of policies of insurance required of Tenant under this Lease shall in no event limit the liability of Tenant under this Lease. Such insurance shall (i) name Landlord, Landlord’s lender, and any other party the Landlord so specifies, as an additional insured, including Landlord’s managing agent, if any; (ii) specifically cover the liability assumed by Tenant under this Lease, including, but not limited to, Tenant’s obligations under Section 10.1 of this Lease; (iii) be issued by an insurance company having a rating of not less than A-:VIII in Best’s Insurance Guide or which is otherwise acceptable to Landlord and licensed to do business in the State of California; (iv) be primary insurance as to all claims thereunder and provide that any insurance carried by Landlord is excess and is non-contributing with any insurance requirement of Tenant; (v) be in form and content reasonably acceptable to Landlord; (vi) contain a cross-liability endorsement or severability of interest clause acceptable to Landlord; and (vii) if commercially available in California, provide that said insurance shall not be canceled or coverage changed unless thirty (30) days’ prior written notice shall have been given to Landlord and any mortgagee of Landlord. Tenant shall deliver said policy or policies or certificates thereof to Landlord on or before the Lease Commencement Date and at least thirty (30) days before the expiration dates thereof. In the event Tenant shall fail to procure such insurance, or to deliver such policies or certificate, Landlord may, at its option, procure such policies for the account of Tenant, and the cost thereof shall be paid to Landlord within five (5) business days after delivery to Tenant of bills therefor.

10.5 **Subrogation.** Landlord and Tenant intend that their respective property loss risks shall be borne by reasonable insurance carriers to the extent above provided, and Landlord and Tenant hereby agree to look solely to, and seek recovery only from, their respective insurance carriers in the event of a property loss to the extent that such loss is the result of a risk insurable under policies of property damage insurance. Notwithstanding anything to the contrary in this Lease, the parties each hereby waive all rights and claims against each other for such losses, and waive all rights of subrogation of their respective insurers, provided such waiver of subrogation shall not affect the right to the insured to recover thereunder. The parties agree that their respective insurance policies are now, or shall be, endorsed such that the waiver of subrogation shall not affect the right of the insured to recover thereunder.

10.6 **Additional Insurance Obligations.** Tenant shall carry and maintain during the entire Lease Term, at Tenant’s sole cost and expense, increased amounts of the insurance required to be carried by Tenant pursuant to this Article 10 and such other reasonable types of insurance coverage and in such reasonable amounts covering the Premises and Tenant’s operations therein, as may be reasonably requested by Landlord, provided that such coverages and/or amounts are consistent with practices for Comparable Buildings.

ARTICLE 11

DAMAGE AND DESTRUCTION

11.1 **Repair of Damage to Premises by Landlord.** Tenant shall promptly notify Landlord of any damage to the Premises resulting from fire or any other casualty. If the Premises or any Common Areas serving or providing access to the Premises shall be damaged by fire or other casualty, Landlord shall promptly and diligently, subject to reasonable delays for insurance adjustment or other matters beyond Landlord’s reasonable control, and subject to all other terms of this Article 11, restore the Base, Shell and Core and such Common Areas. Such restoration shall be to substantially the same condition of the Base, Shell and Core and the Common Areas prior to the casualty, except for modifications required by zoning and building codes and other laws or by the holder of a mortgage on the Building or Project or any other modifications to the Common Areas deemed desirable by

Landlord, provided that access to the Premises and any common restrooms serving the Premises shall not be materially impaired. Upon the occurrence of any damage to the Premises, upon notice (the “**Landlord Repair Notice**”) to Tenant from Landlord, Tenant shall assign to Landlord (or to any party designated by Landlord) all insurance proceeds payable to Tenant under Tenant’s insurance required under Section 10.3 of this Lease, and Landlord shall repair any injury or damage to the Tenant Improvements and the Original Improvements installed in the Premises and shall return such Tenant Improvements and Original Improvements to their original condition; provided that if the cost of such repair by Landlord exceeds the amount of insurance proceeds received by Landlord from Tenant’s insurance carrier, as assigned by Tenant, such excess shall be paid by Tenant to Landlord prior to Landlord’s commencement of repair of the damage. Prior to the commencement of construction, Tenant shall submit to Landlord, for Landlord’s review and approval, all plans, specifications and working drawings relating thereto, and Landlord shall select the contractors to perform such improvement work. Landlord shall not be liable for any inconvenience or annoyance to Tenant or its visitors, or injury to Tenant’s business resulting in any way from such damage or the repair thereof; provided however, that if such fire or other casualty shall have damaged the Premises or Common Areas necessary to Tenant’s occupancy, Landlord shall allow Tenant a proportionate abatement of Rent to the extent Landlord is reimbursed from the proceeds of rental interruption insurance purchased by Landlord as part of Operating Expenses, during the time and to the extent the Premises are unfit for occupancy for the Permitted Use, and not occupied by Tenant as a result thereof; provided, further, however, that if the damage or destruction is due to the negligence or willful misconduct of Tenant or any of its agents, employees, contractors, invitees or guests, Tenant shall be responsible for any reasonable, applicable insurance deductible (which shall be payable to Landlord upon demand) and there shall be no rent abatement.

11.2 **Landlord’s Option to Repair.** Notwithstanding the terms of Section 11.1 of this Lease, Landlord may elect not to rebuild and/or restore the Premises, Building and/or Project, and instead terminate this Lease, by notifying Tenant in writing of such termination within sixty (60) days after the date of discovery of the damage, such notice to include a termination date giving Tenant sixty (60) days to vacate the Premises, but Landlord may so elect only if the Building or Project shall be damaged by fire or other casualty or cause, whether or not the Premises are affected, and one or more of the following conditions is present: (i) in Landlord’s reasonable judgment, repairs cannot reasonably be completed within ninety (90) days after the date of discovery of the damage (when such repairs are made without the payment of overtime or other premiums); (ii) the holder of any mortgage on the Building or Project or ground lessor with respect to the Building or Project shall require that the insurance proceeds or any portion thereof be used to retire the mortgage debt, or shall terminate the ground lease, as the case may be; (iii) the damage is not fully covered by Landlord’s insurance policies; or (iv) Landlord decides to rebuild the Building or Common Areas so that they will be substantially different structurally or architecturally; or (v) the damage occurs during the last twelve (12) months of the Lease Term.

11.3 **Waiver of Statutory Provisions.** The provisions of this Lease, including this Article 11, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, the Building or the Project, and any statute or regulation of the State of California, including, without limitation, Sections 1932(2) and 1933(4) of the California Civil Code, with respect to any rights or obligations concerning damage or destruction in the absence of an express agreement between the parties, and any other statute or regulation, now or hereafter in effect, shall have no application to this Lease or any damage or destruction to all or any part of the Premises, the Building or the Project.

ARTICLE 12

NONWAIVER

No provision of this Lease shall be deemed waived by either party hereto unless expressly waived in a writing signed thereby. The waiver by either party hereto of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of any subsequent breach of same or any other term, covenant or condition herein contained. The subsequent acceptance of Rent hereunder by Landlord shall not be deemed to be a waiver of any preceding breach by Tenant of any term, covenant or condition of this Lease, other than the failure of Tenant to pay the particular Rent so accepted, regardless of Landlord’s knowledge of such preceding breach at the time of acceptance of such Rent. No acceptance of a lesser amount than the Rent herein stipulated shall be deemed a waiver of Landlord’s right to receive the full amount due, nor shall any endorsement or statement on any check or payment or any letter accompanying such check or payment be deemed an accord and satisfaction, and Landlord

may accept such check or payment without prejudice to Landlord's right to recover the full amount due. No receipt of monies by Landlord from Tenant after the termination of this Lease shall in any way alter the length of the Lease Term or of Tenant's right of possession hereunder, or after the giving of any notice shall reinstate, continue or extend the Lease Term or affect any notice given Tenant prior to the receipt of such monies, it being agreed that after the service of notice or the commencement of a suit, or after final judgment for possession of the Premises, Landlord may receive and collect any Rent due, and the payment of said Rent shall not waive or affect said notice, suit or judgment.

ARTICLE 13

CONDEMNATION

If the whole or any part of the Premises, Building or Project shall be taken by power of eminent domain or condemned by any competent authority for any public or quasi-public use or purpose, or if any adjacent property or street shall be so taken or condemned, or reconfigured or vacated by such authority in such manner as to require the use, reconstruction or remodeling of any part of the Premises, Building or Project, or if Landlord shall grant a deed or other instrument in lieu of such taking by eminent domain or condemnation, Landlord shall have the option to terminate this Lease effective as of the date possession is required to be surrendered to the authority. If more than twenty-five percent (25%) of the rentable square feet of the Premises is taken, or if access to the Premises is substantially impaired, in each case for a period in excess of one hundred eighty (180) days, Tenant shall have the option to terminate this Lease effective as of the date possession is required to be surrendered to the authority. Tenant shall not because of such taking assert any claim against Landlord or the authority for any compensation because of such taking and Landlord shall be entitled to the entire award or payment in connection therewith, except that Tenant shall have the right to file any separate claim available to Tenant for any taking of Tenant's personal property and fixtures belonging to Tenant and removable by Tenant upon expiration of the Lease Term pursuant to the terms of this Lease, and for moving expenses, so long as such claims do not diminish the award available to Landlord, its ground lessor with respect to the Building or Project or its mortgagee, and such claim is payable separately to Tenant. All Rent shall be apportioned as of the date of such termination. If any part of the Premises shall be taken, and this Lease shall not be so terminated, the Rent shall be proportionately abated. Tenant hereby waives any and all rights it might otherwise have pursuant to Section 1265.130 of The California Code of Civil Procedure. Notwithstanding anything to the contrary contained in this Article 13, in the event of a temporary taking of all or any portion of the Premises for a period of one hundred eighty (180) days or less, then this Lease shall not terminate but the Base Rent and the Additional Rent shall be abated for the period of such taking in proportion to the ratio that the amount of rentable square feet of the Premises taken bears to the total rentable square feet of the Premises. Landlord shall be entitled to receive the entire award made in connection with any such temporary taking.

ARTICLE 14

ASSIGNMENT AND SUBLETTING

14.1 **Transfers.** Except as provided in Section 14.7 below, Tenant shall not, without the prior written consent of Landlord, assign, mortgage, pledge, hypothecate, encumber, or permit any lien to attach to, or otherwise transfer, this Lease or any interest hereunder, permit any assignment, or other transfer of this Lease or any interest hereunder by operation of law, sublet the Premises or any part thereof, or enter into any license or concession agreements or otherwise permit the occupancy or use of the Premises or any part thereof by any persons other than Tenant and its employees and contractors (all of the foregoing are hereinafter sometimes referred to collectively as "**Transfers**" and any person to whom any Transfer is made or sought to be made is hereinafter sometimes referred to as a "**Transferee**"). If Tenant desires Landlord's consent to any Transfer, Tenant shall notify Landlord in writing, which notice (the "**Transfer Notice**") shall include (i) the proposed effective date of the Transfer, which shall not be less than thirty (30) days nor more than one hundred eighty (180) days after the date of delivery of the Transfer Notice, (ii) a description of the portion of the Premises to be transferred (the "**Subject Space**"), (iii) all of the terms of the proposed Transfer and the consideration therefor, including calculation of the "**Transfer Premium**", as that term is defined in Section 14.3 below, in connection with such Transfer, the name and address of the proposed Transferee, and an executed copy of all documentation effectuating the proposed Transfer, including all operative documents to evidence such Transfer and all agreements incidental or related to such Transfer, (iv) current financial statements of the proposed Transferee certified by an officer, partner or owner thereof (subject

to Landlord's execution of a commercially reasonable non-disclosure agreement), business credit and personal references and history of the proposed Transferee and any other information reasonably required by Landlord which will enable Landlord to determine the financial responsibility, character, and reputation of the proposed Transferee, nature of such Transferee's business and proposed use of the Subject Space and (v) an executed estoppel certificate from Tenant stating the information set forth in items (a) through (d) in Article 17 below. Any Transfer made without Landlord's prior written consent shall, at Landlord's option, be null, void and of no effect, and shall, at Landlord's option, constitute a default by Tenant under this Lease. Whether or not Landlord consents to any proposed Transfer, Tenant shall pay Landlord's (or Landlord's property manager's) review and processing fees, as well as any reasonable professional fees (including, without limitation, attorneys', accountants', architects', engineers' and consultants' fees) incurred by Landlord (or Landlord's property manager), which review and processing fees and reasonable professional fees shall not exceed in the aggregate \$2,500 per consent request, within thirty (30) days after written request by Landlord.

14.2 Landlord's Consent. Landlord shall not unreasonably withhold its consent to any proposed Transfer of the Subject Space to the Transferee on the terms specified in the Transfer Notice. Without limitation as to other reasonable grounds for withholding consent, the parties hereby agree that it shall be reasonable under this Lease and under any applicable law for Landlord to withhold consent to any proposed Transfer where one or more of the following apply:

14.2.1 The Transferee is of a character or reputation or engaged in a business which is not consistent with the quality of the Building or the Project, or would be a significantly less prestigious occupant of the Building than Tenant;

14.2.2 The Transferee intends to use the Subject Space for purposes which are not permitted under this Lease;

14.2.3 The Transferee is either a governmental agency or instrumentality thereof;

14.2.4 The Transferee is not a party of reasonable financial worth and/or financial stability in light of the responsibilities to be undertaken in connection with the Transfer on the date consent is requested;

14.2.5 The proposed Transfer would cause a violation of another lease for space in the Project, or would give an occupant of the Project a right to cancel its lease (provided that Landlord will furnish Tenant with a list of such restrictions upon Tenant's request from time to time);

14.2.6 The terms of the proposed Transfer will allow the Transferee to exercise a right of renewal, right of expansion, right of first offer, or other similar right held by Tenant (or will allow the Transferee to occupy space leased by Tenant pursuant to any such right);

14.2.7 Either the proposed Transferee, or any person or entity which directly or indirectly, controls, is controlled by, or is under common control with, the proposed Transferee, (i) occupies space in the Project at the time of the request for consent, or (ii) is negotiating with Landlord (which for purposes of this item (ii) and (iii), below, shall be evidenced by the transmittal of one or more letters of intent, draft proposals or lease documents by Tenant to Landlord or Landlord to Tenant) to lease space in the Project at such time, or (iii) has negotiated with Landlord during the three (3)-month period immediately preceding the Transfer Notice, and in each of such cases Landlord has reasonably acceptable space available for lease to such proposed Transferee; or

14.2.8 The Transfer provides for a rental or other payment for the use, occupancy or utilization of the Subject Space based in whole or in part on the income or profits derived by any person or entity from the Subject Space (other than an amount based on a fixed percentage or percentages of gross receipts or sales).

Notwithstanding anything to the contrary contained herein, in no event shall Tenant enter into any Transfer for the possession, use, occupancy or utilization (collectively, "**use**") of the part of the Premises which (i) provides for a rental or other payment for such use based in whole or in part on the income or profits derived by any person from the Premises (other than an amount based on a fixed percentage or percentages of gross receipts or sales), and

Tenant agrees that all Transfers of any part of the Premises shall provide that the person having an interest in the use of the Premises shall not enter into any lease or sublease which provides for a rental or other payment for such use based in whole or in part on the income or profits derived by any person from the Premises (other than an amount based on a fixed percentage or percentages of gross receipts of sales), or (ii) would cause any portion of the amounts payable to Landlord hereunder to not constitute “rents from real property” within the meaning of Section 512(b)(3) of the Internal Revenue Code of 1986, and any such purported Transfer shall be absolutely void and ineffective as a conveyance of any right or interest in the possession, use, occupancy or utilization of any part of the Premises. Without limiting Landlord’s right to withhold its consent to any assignment or sublease by Tenant, and regardless of whether Landlord shall have consented to any such assignment or sublease, neither Tenant nor any other person having an interest in the possession, use or occupancy of the Premises or any part thereof shall enter into any lease, sublease, license, concession, assignment or other transfer or agreement for possession, use or occupancy of all or any portion of the Premises which provides for rental or other payment for such use, occupancy or utilization based, in whole or in part, on the net income or profits derived by any person or entity from the space so leased, used or occupied, and any such purported lease, sublease, license, concession, assignment or other transfer or agreement shall be absolutely void and ineffective as a conveyance of any right or interest in the possession, use or occupancy of all or any part of the Premises. There shall be no deduction from the rental payable under any sublease or other transfer nor from the amount thereof passed on to any person or entity, for any expenses or costs related in any way to the subleasing or transfer of such space.

If Landlord consents to any Transfer pursuant to the terms of this Section 14.2 (and does not exercise any recapture rights Landlord may have under Section 14.4 of this Lease), Tenant may within six (6) months after Landlord’s consent, but not later than the expiration of said six-month period, enter into such Transfer of the Subject Space, upon substantially the same terms and conditions as are set forth in the Transfer Notice furnished by Tenant to Landlord pursuant to Section 14.1 of this Lease, provided that if there are any changes in the terms and conditions from those specified in the Transfer Notice (i) such that Landlord would initially have been entitled to refuse its consent to such Transfer under this Section 14.2, or (ii) which would cause the proposed Transfer to be more favorable to the Transferee than the terms set forth in Tenant’s original Transfer Notice, Tenant shall again submit the Transfer to Landlord for its approval and other action under this Article 14 (including Landlord’s right of recapture, if any, under Section 14.4 of this Lease). Notwithstanding anything to the contrary in this Lease, if Tenant or any proposed Transferee claims that Landlord has unreasonably withheld or delayed its consent under Section 14.2 or otherwise has breached or acted unreasonably under this Article 14, their sole remedies shall be a declaratory judgment and an injunction for the relief sought without any monetary damages, and Tenant hereby waives all other remedies, including, without limitation, the remedies set forth in California Civil Code Section 1995.310 and any other right at law or equity to terminate this Lease, on its own behalf and, to the extent permitted under all applicable laws, on behalf of the proposed Transferee. Tenant shall indemnify, defend and hold harmless Landlord from any and all liability, losses, claims, damages, costs, expenses, causes of action and proceedings involving any third party or parties (including without limitation Tenant’s proposed subtenant or assignee) who claim they were damaged by Landlord’s wrongful withholding or conditioning of Landlord’s consent.

14.3 Transfer Premium. If Landlord consents to a Transfer, as a condition thereto which the parties hereby agree is reasonable, Tenant shall pay to Landlord fifty percent (50%) of any “Transfer Premium,” as that term is defined in this Section 14.3, received by Tenant from such Transferee in any particular calendar month, which amount shall be paid to Landlord immediately following Tenant’s receipt of the same. “**Transfer Premium**” shall mean all rent, additional rent or other consideration payable by such Transferee in connection with the Transfer in excess of the Rent and Additional Rent payable by Tenant under this Lease during the term of the Transfer on a per rentable square foot basis if less than all of the Premises is transferred, after deducting the reasonable expenses incurred by Tenant for (i) any changes, alterations and improvements to the Premises in connection with the Transfer, (ii) any market rate, third party brokerage commissions and reasonable attorneys’ fees incurred in connection with the Transfer, and (iii) any other concessions reasonably required to induce a subtenant (collectively, the “**Subleasing Costs**”); provided, however, that if, at the time of any such sublease or assignment, Landlord determines that the foregoing “Transfer Premium” formula may result in the receipt by Landlord of amounts that the Landlord may not be permitted to receive pursuant to any requirements, obligation or understanding applicable to Landlord, the parties agree to enter into an amendment to this Lease which revises the “Transfer Premium” formula in a manner that (x) is mutually agreed to by the parties and (y) does not result in any material increase in the expected costs or benefits to either party under this Section 14.3. “Transfer Premium” shall also include, but not be limited to, key money, bonus money or other cash consideration paid by Transferee to Tenant in connection with

such Transfer, and any payment in excess of fair market value for services rendered by Tenant to Transferee or for assets, fixtures, inventory, equipment, or furniture transferred by Tenant to Transferee in connection with such Transfer; provided, however, that if, at the time of any such sublease or assignment, Landlord determines that Landlord's receipt of the foregoing amounts may result in the receipt by Landlord of amounts that the Landlord may not be permitted to receive pursuant to any requirements, obligation or understanding applicable to Landlord, the parties agree to enter into an amendment to this Lease which revises such amounts in a manner that (x) is mutually agreed to by the parties and (y) does not result in any material increase in the expected costs or benefits to either party under this Section 14.3.

14.4 Landlord's Option as to Subject Space. Notwithstanding anything to the contrary contained in this Article 14, Landlord shall have the option, by giving written notice to Tenant within thirty (30) days after receipt of any Transfer Notice, to recapture the Subject Space for the remainder of the Lease Term. Such recapture notice shall cancel and terminate this Lease with respect to the Subject Space as of the date stated in the Transfer Notice as the effective date of the proposed Transfer (or at Landlord's option, shall cause the Transfer to be made to Landlord or its agent, in which case the parties shall execute the Transfer documentation promptly thereafter). In the event of a recapture by Landlord, if this Lease shall be canceled with respect to less than the entire Premises, (i) the Rent reserved herein, (ii) Tenant's Share, and (iii) Tenant's parking privileges shall be prorated on the basis of the number of rentable square feet retained by Tenant in proportion to the number of rentable square feet contained in the Premises, and this Lease as so amended shall continue thereafter in full force and effect, and upon request of either party, the parties shall execute written confirmation of the same. If Landlord declines, or fails to elect in a timely manner to recapture the Subject Space under this Section 14.4, then, provided Landlord has consented to the proposed Transfer, Tenant shall be entitled to proceed to transfer the Subject Space to the proposed Transferee, subject to provisions of this Article 14.

14.5 Effect of Transfer; Assumption of Obligations. In the event of a Transfer, (i) the terms and conditions of this Lease shall in no way be deemed to have been waived or modified, (ii) Landlord's consent to a Transfer shall not be deemed consent to any further Transfer by either Tenant or a Transferee, (iii) Tenant shall deliver to Landlord, promptly after execution, an executed copy of all documentation pertaining to the Transfer in form reasonably acceptable to Landlord, and (iv) Tenant shall furnish upon Landlord's request a complete statement, certified by an independent certified public accountant, or Tenant's chief financial officer, setting forth in detail the computation of any Transfer Premium Tenant has derived and shall derive from such Transfer. No Transfer, whether with or without Landlord's consent, shall relieve Tenant or any guarantor of this Lease from liability under this Lease. The acceptance of rent by Landlord from any other person shall not be deemed to be a waiver by Landlord of any provision of this Lease or to be consent to any Transfer. Each Transferee that is an assignee of this Lease shall assume, as provided in this Section 14.5, the obligations of Tenant under this Lease and shall be and remain liable jointly and severally with Tenant for the payment of the Rent, and for the performance of all of the terms, covenants, conditions and agreements herein contained on Tenant's part to be performed for the term of this Lease. Each Transferee that is a sublessee shall assume as provided in this Section 14.5, the obligations of Tenant under this Lease applicable to the Transfer Space and shall be and remain liable jointly and severally with Tenant for the performance of all of the terms, covenants, conditions and agreements herein contained on Tenant's part to be performed for the term of such sublease to the extent applicable to the Transfer Space other than Rent or other monetary amounts which shall be consistent with the Transfer Notice. No assignment shall be binding on Landlord unless the Transferee or Tenant shall deliver to Landlord either (a) a counterpart of the assignment and an instrument which contains a covenant of assumption by the Transferee or (b) a separate confirmation of such assignment and assumption, in either case reasonably satisfactory in substance and form to Landlord consistent with the requirements of this Section 14.5, but the failure or refusal of the Transferee to execute such instrument of assumption shall not release or discharge the Transferee from its liability as set forth above. In no event shall any Transferee assign, sublease or otherwise encumber its interest in this Lease or further sublet any portion of the Subject Space, or otherwise suffer or permit any portion of the Subject Space to be used or occupied by others. Landlord or its authorized representatives shall have the right at all reasonable times to audit the books, records and papers of Tenant relating to any Transfer, and shall have the right to make copies thereof. If the Transfer Premium respecting any Transfer shall be found understated, Tenant shall, within thirty (30) days after demand, pay the deficiency, and if understated by more than two percent (2%), Tenant shall pay Landlord's costs of such audit.

14.6 **Additional Transfers.** Subject to Section 14.7 below, the term “**Transfer**” shall also include (i) if Tenant is a partnership, the withdrawal or change, voluntary, involuntary or by operation of law, of fifty percent (50%) or more of the partners, or transfer of fifty percent (50%) or more of partnership interests, within a twelve (12)-month period, or the dissolution of the partnership without immediate reconstitution thereof, and (ii) if Tenant is a closely held corporation (*i.e.*, whose stock is not publicly held and not traded through an exchange or over the counter), (A) the dissolution, merger, consolidation or other reorganization of Tenant or (B) the sale or other transfer of an aggregate of fifty percent (50%) or more of the voting shares of Tenant (other than to immediate family members by reason of gift or death), within a twelve (12)-month period, or (C) the sale, mortgage, hypothecation or pledge of an aggregate of fifty percent (50%) or more of the value of the unencumbered assets of Tenant within a twelve (12)-month period. For the avoidance of doubt, the raising of additional capital, or an initial public offering event, shall not be deemed a Transfer within the meaning and provisions of this Article.

14.7 **Permitted Transfers.** Notwithstanding anything to the contrary contained in this Article 14, Tenant shall have the right, without Landlord’s consent (and Landlord shall not have any right to recapture any space or any right to a Transfer Premium in connection therewith) to Transfer all or a portion of the Premises, or the leasehold hereunder (each a “**Permitted Transfer**”), to an entity acquired by Tenant or which acquires Tenant, or an entity controlling, under common control with or controlled by Tenant, including an entity resulting from a merger or consolidation by Tenant, and any entity that acquires all or substantially all of the assets of Tenant (each a “**Permitted Transferee**”), provided that: (1) Tenant is not in default hereunder (beyond any applicable notice and cure period); (2) the Permitted Transferee must expressly assume in writing a pro rata share of Tenant’s obligations under this Lease in the proportion that the number of rentable square feet of the Premises subleased or assigned to such Permitted Transferee bears to the total number of rentable square feet in the Premises, without relieving Tenant of any liability hereunder; (3) the Permitted Transferee has a Tangible Net Worth and unrestricted available cash or cash equivalents equal to or greater than the Tangible Net Worth and cash of Tenant as of the date immediately prior to the Transfer; (4) Tenant shall have notified Landlord in writing (and provided Landlord with evidence reasonably satisfactory to Landlord of compliance with this Section 14.7) at least five (5) days prior to the effective date of such Permitted Transfer (or promptly upon closing, if Tenant is prohibited by law from making such disclosure to Landlord); and (5) the applicable transaction is undertaken for a bona fide business purpose and not principally or exclusively as a means to evade any of the requirements of this Lease (including, but not limited to the requirements of this Article 14). “**Tangible Net Worth**” means the excess of total assets over total liabilities (in each case, determined in accordance with generally accepted accounting principles) excluding from the determination of total assets all assets which would be classified as intangible assets under generally accepted accounting principles, or the equivalent thereof, including, without limitation, goodwill, licenses, patents, trademarks, trade names, copyrights, and franchises. For purposes of this definition, the word “**control**,” as used above, means with respect to a Person that is a corporation, the right to exercise, directly or indirectly, more than fifty percent (50%) of the voting rights attributable to the shares of the controlled corporation and, with respect to a Person that is not a corporation, the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of the controlled Person. The word “**Person**” means an individual, partnership, trust, corporation, firm or other entity. The occurrence of a Permitted Transfer shall not waive Landlord’s rights with respect to any subsequent assignment, sublease or other transfer.

14.8 **Occurrence of Default.** Any Transfer hereunder shall be subordinate and subject to the provisions of this Lease, and if this Lease shall be terminated during the term of any Transfer, Landlord shall have the right to: (i) treat such Transfer as cancelled and repossess the Subject Space by any lawful means, or (ii) require that such Transferee attorn to and recognize Landlord as its landlord under any such Transfer. If Tenant shall be in default under this Lease, Landlord is hereby irrevocably authorized, as Tenant’s agent and attorney-in-fact, to direct any Transferee to make all payments under or in connection with such Transfer directly to Landlord (which Landlord shall apply towards Tenant’s obligations under this Lease) until such default is cured. Upon any assignment of Tenant’s interest in this Lease, the assignee shall assume in writing all obligations and covenants of Tenant thereafter to be performed or observed under this Lease. No collection or acceptance of rent by Landlord from any Transferee shall be deemed a waiver of any provision of this Article 14 or the approval of any Transferee or a release of Tenant from any obligation under this Lease, whether theretofore or thereafter accruing. In no event shall Landlord’s enforcement of any provision of this Lease against any Transferee be deemed a waiver of Landlord’s right to enforce any term of this Lease against Tenant or any other person. If Tenant’s obligations hereunder have been guaranteed, Landlord’s consent to any Transfer shall not be effective unless the guarantor also consents to such Transfer.

ARTICLE 15

SURRENDER OF PREMISES; OWNERSHIP AND REMOVAL OF TRADE FIXTURES

15.1 **Surrender of Premises.** No act or thing done by Landlord or any agent or employee of Landlord during the Lease Term shall be deemed to constitute an acceptance by Landlord of a surrender of the Premises unless such intent is specifically acknowledged in writing by Landlord. The delivery of keys to the Premises to Landlord or any agent or employee of Landlord shall not constitute a surrender of the Premises or effect a termination of this Lease, whether or not the keys are thereafter retained by Landlord, and notwithstanding such delivery Tenant shall be entitled to the return of such keys at any reasonable time upon request until this Lease shall have been properly terminated. The voluntary or other surrender of this Lease by Tenant, whether accepted by Landlord or not, or a mutual termination hereof, shall not work a merger, and at the option of Landlord shall operate as an assignment to Landlord of all subleases or subtenancies affecting the Premises or terminate any or all such sublessees or subtenancies.

15.2 **Removal of Tenant Property by Tenant.** Upon the expiration of the Lease Term, or upon any earlier termination of this Lease, Tenant shall, subject to the provisions of this Article 15, quit and surrender possession of the Premises to Landlord in as good order and condition as when Tenant took possession and as thereafter improved by Landlord and/or Tenant, casualties, reasonable wear and tear and repairs which are specifically made the responsibility of Landlord hereunder excepted. Upon such expiration or termination, Tenant shall, without expense to Landlord, remove or cause to be removed from the Premises all debris and rubbish, and such items of furniture, equipment, business and trade fixtures, free-standing cabinet work, movable partitions, telecommunications wiring and cabling installed by or on behalf of Tenant, and other articles of personal property owned by Tenant or installed or placed by Tenant at its expense in the Premises, and such similar articles of any other persons claiming under Tenant, as Landlord may, in its sole discretion, require to be removed, and Tenant shall repair at its own expense all damage to the Premises and Building resulting from such removal. Tenant shall also remove any supplemental HVAC units installed by or on behalf of Tenant to serve the Premises after the Lease Commencement Date, together with all associated equipment (including but not limited to conduits, wiring and piping which shall be removed to source), and repair and restore all areas affected by such removal, at Tenant's cost and expense.

ARTICLE 16

HOLDING OVER

If Tenant holds over after the expiration of the Lease Term or earlier termination thereof, with or without the express or implied consent of Landlord, such tenancy shall be from month-to-month only, and shall not constitute a renewal hereof or an extension for any further term, and in such case Rent shall be payable at a monthly rate equal to 150% of the Rent applicable during the last rental period of the Lease Term under this Lease. Such month-to-month tenancy shall be subject to every other applicable term, covenant and agreement contained herein. Nothing contained in this Article 16 shall be construed as consent by Landlord to any holding over by Tenant, and Landlord expressly reserves the right to require Tenant to surrender possession of the Premises to Landlord as provided in this Lease upon the expiration or other termination of this Lease. The provisions of this Article 16 shall not be deemed to limit or constitute a waiver of any other rights or remedies of Landlord provided herein or at law. If Tenant fails to surrender the Premises upon the termination or expiration of this Lease, in addition to any other liabilities to Landlord accruing therefrom, Tenant shall protect, defend, indemnify and hold Landlord harmless from all loss, costs (including reasonable attorneys' fees) and liability resulting from such failure, including, without limiting the generality of the foregoing, any claims made by any succeeding tenant founded upon such failure to surrender and any lost profits to Landlord resulting therefrom.

ARTICLE 17

ESTOPPEL CERTIFICATES

Within five (5) business days following a request in writing by Landlord, Tenant shall execute, acknowledge and deliver to Landlord an estoppel certificate, stating (a) that this Lease is unmodified and is in full force and effect (or, if there have been modifications, that this Lease is in full force and effect as modified, and setting forth such modifications), (b) the dates to which Rent and other sums payable hereunder have been paid, (c) either that, to the knowledge of Tenant, no default exists hereunder or, specifying each such default of which such Tenant has knowledge and (d) any other information reasonably requested by Landlord or Landlord's current or prospective mortgagee. Any such certificate may be relied upon by any current or prospective mortgagee or purchaser of all or any portion of the Project. Tenant shall execute and deliver whatever other instruments may be reasonably required for such purposes. At any time during the Lease Term, Landlord may require Tenant, and to the extent applicable, any guarantor(s), to provide Landlord with a current financial statement and (if available) financial statements of the two (2) years prior to the current financial statement year. Such statements shall be delivered by Tenant and such guarantor(s) to Landlord within fifteen (15) days after Landlord's written request therefor and be prepared in accordance with generally accepted accounting principles and, if such is the normal practice of Tenant or such guarantor(s), shall be audited by an independent certified public accountant with copies of the auditor's statement, reflecting Tenant's or such guarantor(s)', as applicable, then-current financial condition in such form and detail as Landlord may reasonably request, which shall be kept confidential by Landlord except that Landlord may share with any prospective buyer, investor or lender of the Project any financial statements of Tenant and guarantor(s) provided to Landlord either prior to or after the date of this Lease (provided that such recipient agrees to keep such statements confidential). The failure of Tenant and any such guarantor(s) to timely execute, acknowledge and deliver such estoppel certificate or other instruments, shall constitute an acceptance of the Premises and an acknowledgment by Tenant and such guarantor(s) that statements included in the estoppel certificate are true and correct, without exception.

ARTICLE 18

SUBORDINATION

This Lease shall be subject and subordinate to all present and future ground or underlying leases of the Building or Project and to the lien of any mortgage, trust deed or other encumbrances now or hereafter in force against the Building or Project or any part thereof, if any, and to all renewals, extensions, modifications, consolidations and replacements thereof, and to all advances made or hereafter to be made upon the security of such mortgages or trust deeds, unless the holders of such mortgages, trust deeds or other encumbrances, or the lessors under such ground lease or underlying leases, require in writing that this Lease be superior thereto. Tenant covenants and agrees in the event any proceedings are brought for the foreclosure of any such mortgage or deed in lieu thereof (or if any ground lease is terminated), to attorn, without any deductions or set-offs whatsoever, to the lienholder or purchaser or any successors thereto upon any such foreclosure sale or deed in lieu thereof (or to the ground lessor), if so requested to do so by such purchaser or lienholder or ground lessor, and to recognize such purchaser or lienholder or ground lessor as the lessor under this Lease, provided such lienholder or purchaser or ground lessor shall agree to accept this Lease and not disturb Tenant's occupancy, so long as Tenant is not in default hereunder beyond applicable notice and cure periods. Landlord's interest herein may be assigned as security at any time to any lienholder. Tenant shall, within five (5) business days of request by Landlord, execute such further instruments or assurances as Landlord may reasonably deem necessary to evidence or confirm the subordination or superiority of this Lease to any such mortgages, trust deeds, ground leases or underlying leases, provided that such instruments or assurances include customary non-disturbance protection for Tenant. Tenant waives the provisions of any current or future statute, rule or law which may give or purport to give Tenant any right or election to terminate or otherwise adversely affect this Lease and the obligations of the Tenant hereunder in the event of any foreclosure proceeding or sale.

ARTICLE 19
DEFAULTS; REMEDIES

19.1 **Events of Default.** The occurrence of any of the following shall constitute a default of this Lease by Tenant:

19.1.1 Any failure by Tenant to pay any Rent or any other charge required to be paid under this Lease, or any part thereof, when due, where such failure continues for three (3) business days after written notice therefor from Landlord to Tenant; or

19.1.2 Any failure by Tenant to observe or perform any other provision, covenant or condition of this Lease to be observed or performed by Tenant where such failure continues for ten (10) days after written notice thereof from Landlord to Tenant; provided that if the nature of such default is such that the same cannot reasonably be cured within a ten (10) day period, Tenant shall not be deemed to be in default if it diligently commences such cure within such period and thereafter diligently proceeds to rectify and cure such default, but in no event exceeding a period of time in excess of sixty (60) days after written notice thereof from Landlord to Tenant; or

19.1.3 The failure by Tenant to observe or perform according to the provisions of Articles 5, 14, 17 or 18 of this Lease where such failure continues for more than two (2) business days after notice from Landlord; or

19.1.4 To the extent permitted by law, a general assignment by Tenant or any guarantor of this Lease for the benefit of creditors, or the taking of any corporate action in furtherance of bankruptcy or dissolution whether or not there exists any proceeding under an insolvency or bankruptcy law, or the filing by or against Tenant or any guarantor of any proceeding under an insolvency or bankruptcy law, unless in the case of a proceeding filed against Tenant or any guarantor the same is dismissed within sixty (60) days, or the appointment of a trustee or receiver to take possession of all or substantially all of the assets of Tenant or any guarantor, unless possession is restored to Tenant or such guarantor within thirty (30) days, or any execution or other judicially authorized seizure of all or substantially all of Tenant's assets located upon the Premises or of Tenant's interest in this Lease, unless such seizure is discharged within thirty (30) days; or

19.1.5 The abandonment of the Premises by Tenant (as "abandonment" is defined in Section 1951.3 of the California Civil Code); or

19.1.6 Any rent paid by Tenant is recovered by the debtor or bankruptcy trustee as a preference payment in the event of the filing by or against Tenant of any proceeding under bankruptcy law; or

19.1.7 Any failure by Tenant to provide Landlord with a renewed LC (as defined in Article 21 below) or a substitute LC in form reasonably acceptable to Landlord at least thirty (30) days prior to the expiration of the then existing LC.

The notice periods provided herein are in lieu of, and not in addition to, any notice periods provided by law.

19.2 **Remedies Upon Default.** Upon the occurrence of any event of default by Tenant, Landlord shall have, in addition to any other remedies available to Landlord at law or in equity (all of which remedies shall be distinct, separate and cumulative), the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever.

19.2.1 Terminate this Lease, in which event Tenant shall immediately surrender the Premises to Landlord, and if Tenant fails to do so, Landlord may, without prejudice to any other remedy which it may have for possession or arrearages in rent, enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, without being liable for prosecution or any claim or damages therefor; and Landlord may recover from Tenant the following:

(a) The worth at the time of award of any unpaid rent which has been earned at the time of such termination; plus

(b) The worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(c) The worth at the time of award of the amount by which the unpaid rent for the balance of the Lease Term after the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(d) Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, specifically including but not limited to, brokerage commissions and advertising expenses incurred, expenses of remodeling the Premises or any portion thereof for a new tenant (whether performed by Landlord or Landlord's property manager), whether for the same or a different use, and any special concessions made to obtain a new tenant; and

(e) At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by applicable law.

The term "**rent**" as used in this Section 19.2 shall be deemed to be and to mean all sums of every nature required to be paid by Tenant pursuant to the terms of this Lease, whether to Landlord or to others. As used in Paragraphs 19.2.1(i) and (ii), above, the "worth at the time of award" shall be computed by allowing interest at the rate set forth in Article 25 of this Lease, but in no case greater than the maximum amount of such interest permitted by law. As used in Paragraph 19.2.1(iii) above, the "worth at the time of award" shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus one percent (1%).

19.2.2 Landlord shall have the remedy described in California Civil Code Section 1951.4 (lessor may continue lease in effect after lessee's breach and abandonment and recover rent as it becomes due, if lessee has the right to sublet or assign, subject only to reasonable limitations). Accordingly, if Landlord does not elect to terminate this Lease on account of any default by Tenant, Landlord may, from time to time, without terminating this Lease, enforce all of its rights and remedies under this Lease, including the right to recover all rent as it becomes due.

19.2.3 Landlord shall at all times have the rights and remedies (which shall be cumulative with each other and cumulative and in addition to those rights and remedies available under Sections 19.2.1 and 19.2.2, above, or any law or other provision of this Lease), without prior demand or notice except as required by applicable law, to seek any declaratory, injunctive or other equitable relief, and specifically enforce this Lease, or restrain or enjoin a violation or breach of any provision hereof.

19.3 **Form of Payment After Default.** Following the occurrence of an event of default by Tenant, Landlord shall have the right to require that any or all subsequent amounts paid by Tenant to Landlord hereunder, whether to cure the default in question or otherwise, be paid in the form of cash, money order, cashier's or certified check drawn on an institution acceptable to Landlord, or by other means approved by Landlord, notwithstanding any prior practice of accepting payments in any different form.

19.4 **Efforts to Relet.** No re-entry or repossession, repairs, maintenance, changes, alterations and additions, reletting, appointment of a receiver to protect Landlord's interests hereunder, or any other action or omission by Landlord shall be construed as an election by Landlord to terminate this Lease or Tenant's right to possession, or to accept a surrender of the Premises, nor shall same operate to release Tenant in whole or in part from any of Tenant's obligations hereunder, unless express written notice of such intention is sent by Landlord to Tenant. Tenant hereby irrevocably waives any right otherwise available under any law to redeem or reinstate this Lease.

19.5 **Subleases of Tenant.** Whether or not Landlord elects to terminate this Lease on account of any default by Tenant, as set forth in this Article 19, Landlord shall have the right to terminate any and all subleases, licenses, concessions or other consensual arrangements for possession entered into by Tenant and affecting the Premises or may, in Landlord's sole discretion, succeed to Tenant's interest in such subleases, licenses, concessions or arrangements. In the event of Landlord's election to succeed to Tenant's interest in any such subleases, licenses, concessions or arrangements, Tenant shall, as of the date of notice by Landlord of such election, have no further right to or interest in the rent or other consideration receivable thereunder.

ARTICLE 20

COVENANT OF QUIET ENJOYMENT

Landlord covenants that Tenant, on paying the Rent, charges for services and other payments herein reserved and on keeping, observing and performing all the other terms, covenants, conditions, provisions and agreements herein contained on the part of Tenant to be kept, observed and performed, shall, during the Lease Term, peaceably and quietly have, hold and enjoy the Premises subject to the terms, covenants, conditions, provisions and agreements hereof without interference by any persons lawfully claiming by or through Landlord. The foregoing covenant is in lieu of any other covenant express or implied.

ARTICLE 21

SECURITY DEPOSIT

21.1 **Security Deposit.** Concurrent with Tenant's execution of this Lease, Tenant shall deposit with Landlord a security deposit in the amount of \$377,000 (the "**Security Deposit**"), as security for the faithful performance by Tenant of all of its obligations under this Lease. If Tenant defaults with respect to any provisions of this Lease beyond expiration of applicable notice and cure periods, including, but not limited to, the provisions relating to the payment of Rent, the removal of property and the repair of resultant damage, Landlord may, without notice to Tenant, but shall not be required to, apply all or any part of the Security Deposit for the payment of any Rent or any other sum in default or for the payment of any amount that Landlord may reasonably spend or may become obligated to spend by reason of Tenant's default, or to compensate Landlord for any other loss or damage that Landlord may suffer by reason of Tenant's default and Tenant shall, upon demand therefor, restore the Security Deposit to its original amount. Any unapplied portion of the Security Deposit shall be returned to Tenant, or, at Landlord's option, to the last assignee of Tenant's interest hereunder, within thirty (30) days following the later of (a) expiration of the Lease Term, and (b) surrender of possession of the Premises to Landlord in the condition required by this Lease. Tenant shall not be entitled to any interest on the Security Deposit. Tenant hereby waives the provisions of Section 1950.7 of the California Civil Code, or any successor statute, which provides that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums specified in this Article 21 above, and all of Landlord's damages under this Lease and California law including, but not limited to, any damages accruing upon termination of this Lease under Section 1951.2 of the California Civil Code and/or those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the acts or omissions of Tenant or any officer, employee, agent, contractor or invitee of Tenant. Notwithstanding anything to the contrary in this Section 21.1, if Tenant has not exercised its right under Section 21.2 to convert a portion of the Security Deposit into a letter of credit, then after Tenant pays the Base Rent for the twenty-second (22nd) month of the Lease Term (such date, the "**Return Date**"), Tenant shall have no further obligation to provide \$235,304 of the Security Deposit (herein, the "**Return Amount**"), and Landlord will refund the Return Amount to Tenant promptly following Tenant's written request, subject to the following sentence. Notwithstanding any contrary provision hereof, if Tenant is in default under this Lease on the Return Date beyond applicable notice and cure periods, or if a default would exist and be continuing on the Return Date but Landlord is barred by applicable law from sending a notice of default to Tenant with respect thereto, or if Tenant is in default under this Lease and Tenant has received notice thereof as required by this Lease, but failed to cure such default within the time period permitted under this Lease or such lesser time as may remain before the Return Date, then the Return Amount shall not be refunded on the Return Date (but the Return Amount shall be refunded upon the curing of such default, subject, however, to Landlord's draw on the Security Deposit as permitted hereunder in connection with a default).

21.2 **Conversion to Letter of Credit.** Tenant shall have the right (provided that Tenant is not in default under this Lease beyond expiration of applicable notice and cure periods) to convert \$235,304 (referred to herein as the "**LC Stated Amount**") of the Security Deposit into an unconditional, irrevocable letter of credit ("**LC**") in the form attached hereto as Exhibit F or a commercially reasonable alternative (subject to Landlord's prior approval, not to be unreasonably withheld). Tenant shall give Landlord at least sixty (60) days prior written notice of the desired date of such conversion (the "**Conversion Date**"), which shall be a business day. On the Conversion Date (provided that Tenant is not in default under this Lease beyond expiration of applicable notice and

cure periods), Tenant shall provide Landlord with an LC in the LC Stated Amount which satisfies the requirements of this Article 21, and Landlord will, upon receipt, refund a portion of the Security Deposit equal to the LC Stated Amount to Tenant. The LC shall be held by Landlord as security for the faithful performance by Tenant of all of the terms, covenants and conditions of this Lease to be kept and performed by Tenant, and the parties hereto acknowledge and agree that the LC does not constitute and shall not, in any event, be deemed to constitute a security deposit. The LC shall be issued by a money center, solvent and nationally recognized bank (a bank which accepts deposits, maintains accounts, has a local San Diego office which will negotiate a letter of credit (or will accept draws via overnight courier or facsimile, and in the case of facsimile draws without the requirement that the original LC be presented prior to honoring the draw request), and whose deposits are insured by the FDIC) reasonably acceptable to Landlord (such approved, issuing bank being referred to herein as the “**Issuing Bank**”), which Issuing Bank must have a short term Fitch Rating which is not less than “F1”, and a long term Fitch Rating which is not less than “A” (or in the event such Fitch Ratings are no longer available, a comparable rating from Standard and Poor’s Professional Rating Service or Moody’s Professional Rating Service) (collectively, the “**Bank’s Credit Rating Threshold**”). Tenant shall pay all expenses, points and/or fees incurred in obtaining and renewing the LC. The LC shall be effective from the date of delivery thereof through the date which is thirty (30) days after the expiration of the Lease Term (the “**LC Expiration Date**”); provided that the LC may be re-issued, renewed or replaced for annual periods, provided that the LC Stated Amount is not reduced except as expressly provided below. Each reissue, renewal or replacement LC shall be in the form attached hereto as Exhibit F or a commercially reasonable alternative (subject to Landlord’s prior approval, not to be unreasonably withheld), and shall be subject to Landlord’s prior written approval which shall not be unreasonably withheld, conditioned or delayed. After Tenant pays the Base Rent for the twenty-second (22nd) month of the Lease Term (such date, the “**Return Date**”), Tenant shall have no further obligation to provide the LC, and Landlord will return the LC to Tenant promptly following Tenant’s written request, subject to the following. Notwithstanding any contrary provision hereof, if Tenant is in default under this Lease on the Return Date beyond applicable notice and cure periods, or if a default would exist and be continuing on the Return Date but Landlord is barred by applicable law from sending a notice of default to Tenant with respect thereto, or if Tenant is in default under this Lease and Tenant has received notice thereof as required by this Lease, but failed to cure such default within the time period permitted under this Lease or such lesser time as may remain before the Return Date, then the LC shall not be returned on the Return Date and Tenant shall remain obligated to provide same (but the LC shall be returned upon the curing of such default, subject, however, to Landlord’s draw on the LC as permitted hereunder in connection with a default).

21.3 Failure to Reissue, Renew or Replace. If the bank that issues the LC fails to extend the expiration date thereof through the LC Expiration Date, and/or if Landlord receives a notice of non-renewal from such bank (as described in the LC), then Tenant shall provide Landlord with a substitute LC. If Tenant fails to provide Landlord with a substitute LC in a form reasonably acceptable to Landlord at least thirty (30) days prior to the expiration of the then existing LC, then (i) such failure shall be deemed a default hereunder, and (ii) Landlord shall be entitled to draw down the full amount of the LC then available and apply, use and retain the proceeds thereof in accordance with Section 21.4. Furthermore, if (1) any of the Issuing Bank’s Fitch Ratings (or other comparable ratings to the extent the Fitch Ratings are no longer available) have been reduced below the Issuing Bank’s Credit Rating Threshold, or (2) if the Issuing Bank is placed into receivership or conservatorship by the Federal Deposit Insurance Corporation or any successor or similar entity, or (3) there is otherwise a material adverse change in the financial condition of the Issuing Bank, and Tenant fails to provide Landlord with a replacement LC, conforming in all respects to the requirements of this Article 21 (including, but not limited to, the requirements placed on the Issuing Bank more particularly set forth in Section 21.2 above), in the LC Stated Amount, within thirty (30) days following Landlord’s written demand therefor (the “**Downgrade Notice**”) then (A) such failure shall constitute a default under Section 19.1.7 above, and (B) Landlord shall be entitled to draw down the full amount of the LC then available and apply, use and retain the proceeds thereof in accordance with Section 21.4. Tenant shall be responsible for the payment of any and all reasonable costs actually incurred by Landlord in connection with the review of any replacement LC (including without limitation Landlord’s reasonable attorneys’ fees), which replacement is required pursuant to this Section or is otherwise requested by Tenant.

21.4 Application of LC and LC Account. Any amount of the LC which is drawn upon by Landlord, but not used or applied by Landlord shall be held by Landlord in an account (the “**LC Account**”) as security for the full and faithful performance of each of the terms hereof by Tenant, subject to use and application as set forth below. If a default shall occur and be continuing with respect to any provision of this Lease beyond applicable notice and cure periods, including, but not limited to, the provisions relating to the payment of Rent, or a default would exist

under this Lease but Landlord is barred by applicable law from sending a notice of default to Tenant with respect thereto, or in the event the LC is not renewed or reissued at least thirty (30) days prior to the expiration of the then existing LC, Landlord may, but shall not be required to, draw upon all or any part of the LC and/or LC Account or use, retain or apply all or any part of the proceeds thereof for the payment of any Rent or any other sum in default, to repair damages caused by Tenant, to clean the Premises, or for the payment of any other amount which Landlord may spend or become obligated to spend by reason of Tenant's default or to compensate Landlord for loss or damage which Landlord may suffer by reason of Tenant's default, including without limitation the amounts to which Landlord may become entitled pursuant to Section 19.2 above (whether or not such amounts have been awarded) and any other loss, liability, expense and damages that may accrue upon Tenant's default or the act or omission of Tenant or any officer, employee, agent or invitee of Tenant, and costs and attorneys' fees incurred by Landlord to recover possession of the Premises upon a default by Tenant hereunder. The use, application, retention or draw of the LC and/or LC Account, or any portion thereof, by Landlord shall not (i) constitute the cure of any default by Tenant or the waiver of such default, (ii) prevent Landlord from exercising any other remedies provided for under this Lease or by law, it being intended that Landlord shall not first be required to proceed against the LC and/or LC Account, or (iii) operate as a limitation on the amount of any recovery to which Landlord may otherwise be entitled. If any portion of the LC and/or LC Account is so drawn upon, or any part of the proceeds thereof is used or applied, Tenant shall, within five (5) business days after written demand therefor, deposit cash with Landlord in an amount equal to the draw upon the LC and/or the amount of the LC Account that was used or applied (so that the combined amount of the remaining sums available to be drawn upon the LC and the LC Account balance equals the LC Stated Amount), and Tenant's failure to do so shall be a default under this Lease. The LC Account may be commingled with other funds of Landlord, shall be held in Landlord's name, and Tenant shall not be entitled to any interest or earnings thereon. Notwithstanding any contrary provision herein, in the event that the total amount of the LC outstanding plus any amount remaining in the LC Account exceeds the LC Stated Amount ("**Excess Security**"), then Landlord shall return the amount of the Excess Security to Tenant upon Tenant's request to the extent that such amount is available in the LC Account.

21.5 **Waiver.** Tenant hereby waives the provisions of Section 1950.7 of the California Civil Code, and all similar or successor provisions of law, now or hereafter in force, and Landlord and Tenant hereby acknowledge that their entire agreement with respect to the LC and the LC Account is set forth herein.

21.6 **Expiration of LC.** Unless a default has occurred and is continuing under this Lease or a default would exist under this Lease but Landlord is barred by applicable law from sending a notice of default to Tenant with respect thereto, within thirty (30) days following the LC Expiration Date, Landlord shall return any LC previously delivered by Tenant and any balance remaining in the LC Account after use and application in accordance with this Article 21, to Tenant (or, at Landlord's option, to the last assignee, if any, of Tenant's interest hereunder), and Tenant shall have no further obligation to provide the LC.

21.7 **Bank Obligation.** Tenant acknowledges and agrees that the LC is a separate and independent obligation of the issuing bank to Landlord and that Tenant is not a third party beneficiary of such obligation, and that Landlord's right to draw upon the LC for the full amount due and owing thereunder shall not be, in any way, restricted, impaired, altered or limited by virtue of any provision of the United States Bankruptcy Code, including without limitation, Section 502(b)(6) thereof.

ARTICLE 22

SUBSTITUTION OF OTHER PREMISES

Landlord shall have the right to move Tenant to other space in the Project comparable to the Premises (which shall be one contiguous space with a comparable layout), and all terms hereof shall apply to the new space with equal force. In such event, Landlord shall give Tenant reasonable prior notice, shall provide Tenant, at Landlord's sole cost and expense, with tenant improvements at least equal in quality and functionality to those in the Premises and shall move Tenant's effects to the new space at Landlord's sole cost and expense at such time and in such manner as to inconvenience Tenant as little as reasonably practicable (i.e., only on a weekend). Simultaneously with such relocation of the Premises, the parties shall execute an amendment to this Lease stating the relocation of the Premises.

ARTICLE 23

SIGNS

23.1 Reserved.

23.2 **Multi-Tenant Floors.** Tenant's suite-identification signage shall be provided by Landlord, at Tenant's cost and expense, and such signage shall be comparable to that used by Landlord for other similar multi-tenant floors in the Building and shall comply with Landlord's Building standard signage program. Tenant shall be responsible for the cost of the removal of Tenant's signage installed pursuant hereto (and associated restoration and repairs) upon the expiration or earlier termination of this Lease, as an obligation which shall expressly survive termination of this Lease, as well as all maintenance and repair costs.

23.3 **Building Directory.** Tenant shall be entitled, at Tenant's cost and expense, to have Landlord display Tenant's name and location in the Building on the Building electronic directory in the lobby of the Building. The location, quality, design, style, and size of such signage shall be consistent with the Landlord's Building standard signage program. Any changes to Tenant's directory signage shall be at Tenant's sole cost and expense.

23.4 **Prohibited Signage and Other Items.** Any signs, notices, logos, pictures, names or advertisements which are installed and that have not been separately approved by Landlord may be removed without notice by Landlord at the sole expense of Tenant. Tenant may not install any signs on the exterior or roof of the Project or the Common Areas. Any signs, window coverings, or blinds (even if the same are located behind the Landlord-approved window coverings for the Building), or other items visible from the exterior of the Premises or Building, shall be subject to the prior approval of Landlord, in its sole discretion. All signage rights are personal to the Original Tenant.

ARTICLE 24

COMPLIANCE WITH LAW

Tenant shall not do anything or suffer anything to be done in or about the Premises or the Project which will in any way conflict with any law, statute, ordinance or other governmental rule, regulation or requirement now in force or which may hereafter be enacted or promulgated, including, without limitation, the Americans with Disabilities Act of 1990 (as may be amended) (collectively, the "**Laws**"). At its sole cost and expense, Tenant shall promptly comply with all such Laws, including, without limitation, the making of any alterations and improvements to the Premises as required due to Tenant's use of the Premises after the Lease Commencement Date (and Landlord will be responsible, at Landlord's cost, for compliance with Laws with respect to construction of the Tenant Improvements, which Landlord will construct in compliance with Laws for general office use of the Premises). Notwithstanding the foregoing to the contrary, Landlord shall be responsible, as part of Operating Expenses to the extent permitted under Article 4 above, for making all alterations to the following portions of the Building and Project required by applicable Laws: (i) structural portions of the Premises and Building, but not including Tenant Improvements or any Alterations installed by or at the request of Tenant; and (ii) those portions of the Building and Project located outside the Premises; provided, however, Tenant shall reimburse Landlord (or Landlord's property manager), within ten (10) days after invoice, for the costs of any such improvements and alterations and other compliance costs to the extent necessitated by or resulting from (A) any Alterations installed by or on behalf of Tenant after the Lease Commencement Date, (B) the negligence or willful misconduct of Tenant or any Tenant Parties that is not covered by insurance obtained by Landlord and as to which the waiver of subrogation applies, and/or (C) Tenant's specific manner of use of the Premises (as distinguished from general office use).

ARTICLE 25
LATE CHARGES

If any installment of Rent or any other sum due from Tenant shall not be received by Landlord or Landlord's designee within five (5) days after said amount is due, then Tenant shall pay to Landlord a late charge equal to five percent (5%) of the overdue amount plus any attorneys' fees incurred by Landlord by reason of Tenant's failure to pay Rent and/or other charges when due hereunder. The late charge shall be deemed Additional Rent and the right to require it shall be in addition to all of Landlord's other rights and remedies hereunder or at law and shall not be construed as liquidated damages or as limiting Landlord's remedies in any manner. In addition to the late charge described above, any Rent or other amounts owing hereunder which are not paid within ten (10) days after the date they are due shall bear interest from the date when due until paid at a rate per annum equal to the lesser of (i) the annual "**Bank Prime Loan**" rate cited in the Federal Reserve Statistical Release Publication G.13(415), published on the first Tuesday of each calendar month (or such other comparable index as Landlord and Tenant shall reasonably agree upon if such rate ceases to be published) plus four (4) percentage points, and (ii) the highest rate permitted by applicable law.

ARTICLE 26
LANDLORD'S RIGHT TO CURE DEFAULT; PAYMENTS BY TENANT

26.1 **Landlord's Cure.** All covenants and agreements to be kept or performed by Tenant under this Lease shall be performed by Tenant at Tenant's sole cost and expense and without any reduction of Rent, except to the extent, if any, otherwise expressly provided herein. If Tenant shall fail to perform any obligation under this Lease, and, except in case of an emergency, such failure shall continue in excess of the time allowed under Section 19.1.2, above, unless a specific time period is otherwise stated in this Lease, Landlord may, but shall not be obligated to, make any such payment or perform any such act on Tenant's part without waiving its rights based upon any default of Tenant and without releasing Tenant from any obligations hereunder.

26.2 **Tenant's Reimbursement.** Except as may be specifically provided to the contrary in this Lease, Tenant shall pay to Landlord (or Landlord's property manager), upon delivery by Landlord to Tenant of statements therefor: (i) sums equal to expenditures reasonably made and obligations incurred by Landlord in connection with the remedying by Landlord of Tenant's defaults pursuant to the provisions of Section 26.1; (ii) sums equal to all losses, costs, liabilities, damages and expenses that Tenant is obligated to pay pursuant to Article 10 of this Lease; and (iii) following a default by Tenant beyond applicable notice and cure periods, sums equal to all expenditures made and obligations incurred by Landlord in collecting or attempting to collect the Rent or in enforcing or attempting to enforce any rights of Landlord under this Lease or pursuant to law, including, without limitation, all legal fees and other amounts so expended. Tenant's obligations under this Section 26.2 shall survive the expiration or sooner termination of the Lease Term.

ARTICLE 27
ENTRY BY LANDLORD

Landlord (or Landlord's property manager) reserves the right at all reasonable times and upon at least 24 hours prior notice to Tenant (except in the case of an emergency) to enter the Premises to (i) inspect them; (ii) show the Premises to prospective purchasers, mortgagees or tenants, or to current or prospective mortgagees, ground or underlying lessors or insurers; (iii) post notices of nonresponsibility; or (iv) alter, improve or repair the Premises or the Building, or for structural alterations, repairs or improvements to the Building or the Building's systems and equipment. Notwithstanding anything to the contrary contained in this Article 27, Landlord (or Landlord's property manager) may enter the Premises at any time to (A) perform services required of Landlord, including janitorial service; (B) take possession due to any breach of this Lease in the manner provided herein; and (C) perform any covenants of Tenant which Tenant fails to perform pursuant to Section 26.1 above. Landlord (or Landlord's property manager) may make any such entries without the abatement of Rent and may take such reasonable steps as required to accomplish the stated purposes. Tenant hereby waives any claims for damages or for any injuries or inconvenience to or interference with Tenant's business, lost profits, any loss of occupancy or quiet enjoyment of the Premises, and any other loss occasioned thereby. For each of the above purposes, Landlord shall at all times have a key with which to unlock all the doors in the Premises, excluding Tenant's vaults, safes and special security areas designated in advance by Tenant. In an emergency, Landlord shall have the right to use any means that Landlord may deem proper to open the doors in and to the Premises. Any entry into the Premises by Landlord in the manner hereinbefore described shall not be deemed to be a forcible or unlawful entry into, or a detainer of, the Premises, or an actual or constructive eviction of Tenant from any portion of the Premises. No provision of this Lease shall be construed as obligating Landlord to perform any repairs, alterations or decorations except as otherwise expressly agreed to be performed by Landlord herein.

ARTICLE 28
TENANT PARKING

28.1 **Tenant Parking Passes.** Subject to and upon the terms and conditions of this Article 28, beginning on the Lease Commencement Date and continuing throughout the Lease Term, (a) Tenant shall rent from Landlord, and Landlord shall rent to Tenant, Tenant's Minimum Parking Passes (as hereinafter defined), and (b) Tenant shall have the right, but not the obligation, to rent parking passes in addition to Tenant's Minimum Parking Passes, provided that the total amount of parking passes rented by Tenant hereunder (including Tenant's Minimum Parking Passes) shall never exceed a maximum total of forty-five (45) parking passes (equivalent to four (4) parking passes per 1,000 usable square feet in the Premises) ("**Tenant's Maximum Parking Passes**"). As used herein, "**Tenant's Minimum Parking Passes**" initially means twenty-three (23) parking passes (equivalent to two (2) parking passes per 1,000 usable square feet in the Premises); provided, however, that effective upon the first (1st) anniversary of the Lease Commencement Date, Tenant's Minimum Parking Passes shall mean thirty-four (34) parking passes (equivalent to three (3) parking passes per 1,000 usable square feet in the Premises). All parking passes rented by Tenant shall pertain to unreserved parking on a first-come, first-serve basis in the Project parking facilities; provided that, at Tenant's option, up to twenty-three (23) of Tenant's Maximum Parking Passes may pertain to reserved parking spaces. Any such passes for reserved parking spaces shall be at locations in the Project parking facilities reasonably designated by Landlord and (i) the cost of identifying any reserved parking for Tenant shall be borne by Tenant, and (ii) upon notice to Tenant, Landlord may relocate any such reserved parking spaces to other location(s) in the Project parking facilities designated by Landlord. Tenant may adjust the amount of parking passes rented hereunder from time to time upon thirty (30) days prior notice to Landlord (but not more frequently than quarterly), provided that Tenant shall never rent less than Tenant's Minimum Parking Passes nor more than Tenant's Maximum Parking Passes. Tenant shall pay to Landlord for all automobile parking passes rented by Tenant hereunder on a monthly basis the prevailing rate charged from time to time at the location of such parking passes (currently \$75.00 per pass per month for unreserved parking and \$175.00 per pass per month for reserved parking). In addition, Tenant shall be responsible for the full amount of any taxes imposed by any governmental authority in connection with the renting of such parking passes by Tenant or the use of the parking facility by Tenant. Tenant's continued right to use the parking passes is conditioned upon Tenant abiding by all commercially reasonable non-discriminatory rules and regulations which are prescribed from time to time for the orderly operation and use of the parking facility where the parking passes are located, including any sticker or other identification system established by Landlord, Tenant's cooperation in seeing that Tenant's employees and visitors also comply with such rules and regulations and Tenant not being in default under this Lease. In addition, Tenant shall comply with all applicable governmental resolutions, laws, rules and regulations. Accordingly, Tenant hereby agrees that Tenant shall not charge its employees for the parking passes utilized by such employees at the Project (notwithstanding any charge which may be imposed upon Tenant for such parking passes pursuant to the terms of this Lease).

28.2 **Other Terms.** Landlord specifically reserves the right to change the size, configuration, design, layout and all other aspects of the Project parking facilities at any time and Tenant acknowledges and agrees that Landlord may, without incurring any liability to Tenant and without any abatement of Rent under this Lease, from time to time, close-off or restrict access to the Project parking facilities for purposes of permitting or facilitating any such construction, alteration or improvements. Tenant agrees that Landlord shall not be liable for damages, by abatement of Rent or otherwise, for failure to provide any parking, including any failure to provide reserved parking spaces, when such failure is occasioned, in whole or in part, by construction, alteration, improvements, repairs or replacements, by any strike, lockout or other labor trouble, by inability to resolve any dispute with any other party to the CC&R's after reasonable effort to do so, by any riot or other dangerous condition, emergency, accident or casualty whatsoever, by act or default of Tenant or other parties, or by any other cause; and such failures shall never be deemed to constitute an eviction or disturbance of Tenant's use and possession of the Premises or relieve Tenant from paying Rent or performing any of its obligations under this Lease. Furthermore, Landlord shall not be liable under any circumstances for a loss of, or injury to, property or for injury to, or interference with, Tenant's business, including, without limitation, loss of profits, however occurring, through or in connection with or incidental to a failure to furnish any parking as set forth in this Article 28. The parking passes rented by Tenant pursuant to this

Article 28 are provided to Tenant solely for use by Tenant's own personnel and such passes may not be transferred, assigned, subleased or otherwise alienated by Tenant without Landlord's prior approval. Tenant may validate visitor parking by such method or methods as may be established from time to time, at the validation rate from time to time generally applicable to visitor parking.

28.3 **Parking Procedures.** The parking passes initially will not be separately identified (other than reserved parking, if any); however Landlord reserves the right in its sole and absolute discretion to separately identify by signs or other markings the area to which Tenant's parking passes relate. Landlord shall have no obligation to monitor the use of such parking facility, nor shall Landlord be responsible for any loss or damage to any vehicle or other property or for any injury to any person. Tenant's parking passes shall be used only for parking of automobiles no larger than full size passenger automobiles, sport utility vehicles or pick-up trucks in connection with Tenant's business operations at the Premises only during the hours that Tenant and/or its personnel are conducting business operations from the Premises; provided, however, occasional overnight parking associated with Tenant's or its personnel's conduct of business from the Premises shall be permitted, subject to Tenant's and/or its personnel's compliance with Landlord's rules related to such overnight parking. Tenant shall comply with all commercially reasonable non-discriminatory rules and regulations which may be prescribed from time to time with respect to parking and/or the parking facilities servicing the Project. Tenant shall not at any time use more parking spaces in the Project parking facilities than the number of parking passes so allocated to Tenant or park its vehicles or the vehicles of others in any portion of the Project parking facilities not designated by Landlord as a non-exclusive parking area. Except with respect to reserved spaces, Tenant shall not have the exclusive right to use any specific parking space. If any person or entity (other than Tenant) has the exclusive right to use any particular parking space(s), Tenant shall not use such spaces. All trucks (other than pick-up trucks) and delivery vehicles shall be (i) parked at the designated areas of the surface parking lot (which designated areas are subject to change by Landlord at any time), (ii) loaded and unloaded in a manner which does not interfere with the businesses of other occupants of the Project, and (iii) permitted to remain on the Project only so long as is reasonably necessary to complete loading and unloading. In the event Landlord elects in its sole and absolute discretion or is required by any law or by the CC&R's to limit or control parking, whether by validation of parking tickets or any other method of assessment, Tenant agrees to participate in such validation or assessment program under such reasonable rules and regulations as are from time to time established by Landlord.

28.4 **Lease of Project Parking Facilities.** Tenant acknowledges that Landlord has entered into a lease of the Project parking facilities and, upon expiration of such parking lease, Landlord may enter into a future lease of any or all of the Project parking facilities (the existing parking lease, and any such future parking lease, each a "**Parking Lease**"). At any time that a Parking Lease is in effect, any reference to "Landlord" in Sections 28.1 through 28.3 shall be a reference to both Landlord and the lessee under such Parking Lease (the "**Parking Lessee**"). The existing Parking Lessee has acknowledged the assignment of the rights of Landlord hereunder (including the right to receive payment for parking passes as provided in Section 28.1), and the assumption by such Parking Lessee of Landlord's obligations, with respect to the Project parking facilities; provided that in no event shall any Parking Lease release Landlord from its obligations under this Lease. During any period when a Parking Lease is in effect, any action that may be taken by Landlord hereunder with respect to the Project parking facilities is taken as an agent of the Parking Lessee. A Parking Lessee may bill the Tenant directly, or Landlord's property manager may collect parking rent on behalf of the Parking Lessee.

ARTICLE 29

MISCELLANEOUS PROVISIONS

29.1 **Terms; Captions.** The words "Landlord" and "Tenant" as used herein shall include the plural as well as the singular. The necessary grammatical changes required to make the provisions hereof apply either to corporations or partnerships or individuals, men or women, as the case may require, shall in all cases be assumed as though in each case fully expressed. The captions of Articles and Sections are for convenience only and shall not be deemed to limit, construe, affect or alter the meaning of such Articles and Sections.

29.2 **Binding Effect.** Subject to all other provisions of this Lease, each of the covenants, conditions and provisions of this Lease shall extend to and shall, as the case may require, bind or inure to the benefit not only of Landlord and of Tenant, but also of their respective heirs, personal representatives, successors or assigns, provided this clause shall not permit any assignment by Tenant contrary to the provisions of Article 14 of this Lease.

29.3 **No Air Rights.** No rights to any view or to light or air over any property are granted to Tenant by this Lease. If at any time any windows of the Premises are temporarily darkened or the light or view therefrom is obstructed by reason of any repairs, improvements, maintenance or cleaning in or about the Project, the same shall be without liability to Landlord and without any reduction or diminution of Tenant's obligations under this Lease.

29.4 **Modification of Lease.** Should any current or prospective mortgagee or ground lessor for the Building or Project require a modification of this Lease, which modification will not cause an increased cost or expense to Tenant or in any other way adversely change the rights and obligations of Tenant hereunder, then and in such event, Tenant agrees that this Lease may be so modified and agrees to execute whatever documents are reasonably required therefor and to deliver the same to Landlord within ten (10) days following a request therefor. At the request of Landlord or any mortgagee or ground lessor, Tenant agrees to execute a short form of Lease and deliver the same to Landlord within ten (10) days following the request therefor.

29.5 **Transfer of Landlord's Interest.** Tenant acknowledges that Landlord has the right to transfer all or any portion of its interest in the Project or Building and in this Lease, and Tenant agrees that in the event of any such transfer, Landlord shall automatically be released from all liability under this Lease arising thereafter and Tenant agrees to look solely to such transferee for the performance of Landlord's obligations hereunder after the date of transfer and such transferee shall be deemed to have fully assumed and be liable for all obligations of this Lease to be performed by Landlord, including the return of any Security Deposit, and Tenant shall attorn to such transferee. Tenant further acknowledges that Landlord may assign its interest in this Lease to a mortgage lender as additional security and agrees that such an assignment shall not release Landlord from its obligations hereunder and that Tenant shall continue to look to Landlord for the performance of its obligations hereunder.

29.6 **Prohibition Against Recording.** Except as provided in Section 29.4 of this Lease, neither this Lease, nor any memorandum, affidavit or other writing with respect thereto, shall be recorded by Tenant or by anyone acting through, under or on behalf of Tenant.

29.7 **Landlord's Title.** Landlord's title is and always shall be paramount to the title of Tenant. Nothing herein contained shall empower Tenant to do any act which can, shall or may encumber the title of Landlord.

29.8 **Relationship of Parties.** Nothing contained in this Lease shall be deemed or construed by the parties hereto or by any third party to create the relationship of principal and agent, partnership, joint venturer or any association between Landlord and Tenant.

29.9 **Application of Payments.** Landlord shall have the right to apply payments received from Tenant pursuant to this Lease, regardless of Tenant's designation of such payments, to satisfy any obligations of Tenant hereunder, in such order and amounts as Landlord, in its sole discretion, may elect.

29.10 **Time of Essence.** Time is of the essence with respect to the performance of every provision of this Lease in which time of performance is a factor.

29.11 **Partial Invalidity.** If any term, provision or condition contained in this Lease shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term, provision or condition to persons or circumstances other than those with respect to which it is invalid or unenforceable, shall not be affected thereby, and each and every other term, provision and condition of this Lease shall be valid and enforceable to the fullest extent possible permitted by law.

29.12 **No Warranty.** In executing and delivering this Lease, Tenant has not relied on any representations, including, but not limited to, any representation as to the amount of any item comprising Additional Rent or the amount of the Additional Rent in the aggregate or that Landlord is furnishing the same services to other tenants, at all, on the same level or on the same basis, or any warranty or any statement of Landlord which is not set forth herein or in one or more of the exhibits attached hereto.

29.13 **Landlord Exculpation.** The liability of Landlord or the Landlord Parties to Tenant for any default by Landlord under this Lease or arising in connection herewith or with Landlord's operation, management, leasing, repair, renovation, alteration or any other matter relating to the Project or the Premises shall be limited solely and exclusively to an amount which is equal to the interest of Landlord in the Building. Neither Landlord, nor any of the Landlord Parties shall have any personal liability therefor, and Tenant hereby expressly waives and releases such personal liability on behalf of itself and all persons claiming by, through or under Tenant. The limitations of liability contained in this Section 29.13 shall inure to the benefit of Landlord's and the Landlord Parties' present and future partners, beneficiaries, officers, directors, trustees, shareholders, agents and employees, and their respective partners, heirs, successors and assigns. Under no circumstances shall any present or future partner of Landlord (if Landlord is a partnership), or trustee or beneficiary (if Landlord or any partner of Landlord is a trust), have any liability for the performance of Landlord's obligations under this Lease. Notwithstanding any contrary provision herein, (i) neither Landlord nor the Landlord Parties shall be liable under any circumstances for injury or damage to, or interference with, Tenant's business, including but not limited to, loss of profits, loss of rents or other revenues, loss of business opportunity, loss of goodwill or loss of use, in each case, however occurring, and (ii) neither Landlord nor Tenant shall have any liability to the other for any consequential, indirect, special or punitive damages, except for Tenant's liability pursuant to Article 16 above.

29.14 **Entire Agreement.** It is understood and acknowledged that there are no oral agreements between the parties hereto affecting this Lease and this Lease constitutes the parties' entire agreement with respect to the leasing of the Premises and supersedes and cancels any and all previous negotiations, arrangements, brochures, agreements and understandings, if any, between the parties hereto or displayed by Landlord to Tenant with respect to the subject matter thereof, and none thereof shall be used to interpret or construe this Lease. None of the terms, covenants, conditions or provisions of this Lease can be modified, deleted or added to except in writing signed by the parties hereto.

29.15 **Right to Lease.** Landlord reserves the absolute right to effect such other tenancies in the Project as Landlord in the exercise of its sole business judgment shall determine to best promote the interests of the Building or Project. Tenant does not rely on the fact, nor does Landlord represent, that any specific tenant or type or number of tenants shall, during the Lease Term, occupy any space in the Building or Project.

29.16 **Force Majeure.** Any prevention, delay or stoppage due to strikes, lockouts, labor disputes, acts of God, acts of war, acts of terrorism, inability to obtain services, labor, or materials or reasonable substitutes therefor, governmental actions, civil commotions, fire or other casualty, and other causes beyond the reasonable control of the party obligated to perform, except with respect to the obligations imposed with regard to Rent and other charges to be paid by Tenant pursuant to this Lease and except as to Tenant's obligations under Articles 5 and 24 of this Lease (collectively, a "**Force Majeure**"), notwithstanding anything to the contrary contained in this Lease, shall excuse the performance of such party for a period equal to any such prevention, delay or stoppage and, therefore, if this Lease specifies a time period for performance of an obligation of either party, that time period shall be extended by the period of any delay in such party's performance caused by a Force Majeure.

29.17 **Waiver of Redemption by Tenant.** Tenant hereby waives, for Tenant and for all those claiming under Tenant, any and all rights now or hereafter existing to redeem by order or judgment of any court or by any legal process or writ, Tenant's right of occupancy of the Premises after any termination of this Lease.

29.18 **Notices.** All notices, demands, statements, designations, approvals or other communications (collectively, "**Notices**") given or required to be given by either party to the other hereunder or by law shall be in writing, shall be (A) sent by United States certified or registered mail, postage prepaid, return receipt requested ("**Mail**"), (B) delivered by a nationally recognized overnight courier, or (C) delivered personally. Any Notice shall be sent, transmitted, or delivered, as the case may be, to Tenant at the appropriate address set forth in Section 9 of the Summary, or to such other place as Tenant may from time to time designate in a Notice to Landlord, or to Landlord at the addresses set forth in Section 10 of the Summary, or to such other places as Landlord may from time to time designate in a Notice to Tenant. Any Notice will be deemed given upon actual or attempted but refused delivery. If Tenant is notified of the identity and address of Landlord's mortgagee or ground or underlying lessor,

Tenant shall give to such mortgagee or ground or underlying lessor written notice of any default by Landlord under the terms of this Lease by registered or certified mail, and such mortgagee or ground or underlying lessor shall be given a reasonable opportunity to cure such default prior to Tenant's exercising any remedy available to Tenant. Landlord and Tenant are parties to a Temporary License Agreement with respect to certain premises in the Building. Landlord hereby acknowledges that Tenant may receive mail addressed to Tenant at the Premises during the term of such Temporary License Agreement (even though the Lease Commencement Date has not yet occurred) and Landlord shall cause such mail to be re-routed to Tenant at the premises under such Temporary License Agreement.

29.19 **Joint and Several.** If there is more than one Tenant, the obligations imposed upon Tenant under this Lease shall be joint and several.

29.20 **Authority; Tenant Representation.** If Tenant is a corporation, trust, partnership or limited liability company, each individual executing this Lease on behalf of Tenant hereby represents and warrants that Tenant is a duly formed and existing entity qualified to do business in California and that Tenant has full right and authority to execute and deliver this Lease and that each person signing on behalf of Tenant is authorized to do so. In such event, Tenant shall, within ten (10) days after execution of this Lease, deliver to Landlord satisfactory evidence of such authority and, upon demand by Landlord, also deliver to Landlord satisfactory evidence of (i) good standing in Tenant's state of formation and (ii) qualification to do business in California. Tenant hereby represents to Landlord that neither Tenant nor, to the best of Tenant's knowledge, any members, partners, subpartners, parent organization, affiliate or subsidiary, or their respective officers, directors, contractors, agents, servants, employees, invitees or licensees (collectively, "**Tenant Individuals**"), to Tenant's current actual knowledge, appears on any of the following lists (collectively, "**Government Lists**") maintained by the United States government:

29.20.1 The two (2) lists maintained by the United States Department of Commerce (Denied Persons and Entities; the Denied Persons list can be found at <http://www.bxa.doc.gov/DPL/Default.shtm>; the Entity List can be found at <http://www.bxa.doc.gov/Entitled/Default.htm>);

29.20.2 The list maintained by the United States Department of Treasury (Specially Designated Nationals and Blocked Persons, which can be found at <http://www.ustras.gov/ofac/t11sdn.pdf>);

29.20.3 The two (2) lists maintained by the United States Department of State (Terrorist Organizations and Debarred Parties; the State Department List of Terrorists can be found at <http://www.state.gov/s/ct/rls/fs/2001/6531.htm>; the List of Debarred Parties can be found at <http://www.pmdtc.org/debar059.htm>); and

29.20.4 Any other list of terrorists, terrorist, organizations or narcotics traffickers maintained pursuant to any of the rules and regulations of the Office of Foreign Assets Control, United States Department of Treasury, or by any other government or agency thereof.

Should any Tenant Individuals appear on any Government Lists at any time during the Lease Term or any applicable Option Term, Landlord shall be entitled to terminate this Lease by written notice to Tenant effective as of the date specified in such notice.

29.21 **Attorneys' Fees.** In the event that either Landlord or Tenant should bring suit for the possession of the Premises, for the recovery of any sum due under this Lease, or because of the breach of any provision of this Lease or for any other relief against the other, then all costs and expenses, including reasonable attorneys', experts' and arbitrators' fees and costs, incurred by the prevailing party therein shall be paid by the other party, which obligation on the part of the other party shall be deemed to have accrued on the date of the commencement of such action and shall be enforceable whether or not the action is prosecuted to judgment.

29.22 **Governing Law; WAIVER OF TRIAL BY JURY.** This Lease shall be construed and enforced in accordance with the laws of the State of California. IN ANY ACTION OR PROCEEDING ARISING HEREFROM, LANDLORD AND TENANT HEREBY CONSENT TO (I) THE JURISDICTION OF ANY COMPETENT COURT WITHIN THE STATE OF CALIFORNIA, (II) SERVICE OF PROCESS BY ANY MEANS AUTHORIZED BY CALIFORNIA LAW, AND (III) IN THE INTEREST OF SAVING TIME AND

EXPENSE, TRIAL WITHOUT A JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER OF THE PARTIES HERETO AGAINST THE OTHER OR THEIR SUCCESSORS IN RESPECT OF ANY MATTER ARISING OUT OF OR IN CONNECTION WITH THIS LEASE, THE RELATIONSHIP OF LANDLORD AND TENANT, TENANT'S USE OR OCCUPANCY OF THE PREMISES, AND/OR ANY CLAIM FOR INJURY OR DAMAGE, OR ANY EMERGENCY OR STATUTORY REMEDY. IN THE EVENT LANDLORD COMMENCES ANY SUMMARY PROCEEDINGS OR ACTION FOR NONPAYMENT OF BASE RENT OR ADDITIONAL RENT, TENANT SHALL NOT INTERPOSE ANY COUNTERCLAIM OF ANY NATURE OR DESCRIPTION (UNLESS SUCH COUNTERCLAIM SHALL BE MANDATORY) IN ANY SUCH PROCEEDING OR ACTION, BUT SHALL BE RELEGATED TO AN INDEPENDENT ACTION AT LAW.

29.23 **Submission of Lease.** Submission of this instrument for examination or signature by Tenant does not constitute a reservation of, option for or option to lease, and it is not effective as a lease or otherwise until execution and delivery by both Landlord and Tenant.

29.24 **Brokers.** Landlord and Tenant hereby warrant to each other that they have had no dealings with any real estate broker or agent in connection with the negotiation of this Lease, excepting only the real estate brokers or agents specified in Section 11 of the Summary (the "**Brokers**"), and that they know of no other real estate broker or agent who is entitled to a commission in connection with this Lease. Each party agrees to indemnify and defend the other party against and hold the other party harmless from any and all claims, demands, losses, liabilities, lawsuits, judgments, costs and expenses (including without limitation reasonable attorneys' fees) with respect to any leasing commission or equivalent compensation alleged to be owing on account of any dealings with any real estate broker or agent, other than the Brokers, occurring by, through, or under the indemnifying party.

29.25 **Independent Covenants.** This Lease shall be construed as though the covenants herein between Landlord and Tenant are independent and not dependent and Tenant hereby expressly waives the benefit of any statute to the contrary and agrees that if Landlord fails to perform its obligations set forth herein, Tenant shall not be entitled to make any repairs or perform any acts hereunder at Landlord's expense or to any setoff of the Rent or other amounts owing hereunder against Landlord.

29.26 **Project or Building Name and Signage.** Landlord shall have the right at any time to change the name of the Building or Project and to install, affix and maintain any and all signs on the exterior and on the interior of the Building or Project as Landlord may, in Landlord's sole discretion, desire. Tenant shall not use the name of the Building or Project or use pictures or illustrations of the Building or Project in advertising or other publicity or for any purpose other than as the address of the business to be conducted by Tenant in the Premises, without the prior written consent of Landlord.

29.27 **Counterparts.** This Lease may be executed in counterparts with the same effect as if both parties hereto had executed the same document. Both counterparts shall be construed together and shall constitute a single lease. This Lease may be executed by a party's signature transmitted by email or by a party's electronic signature, and copies of this Lease executed and delivered by means of emailed copies of signatures or originals of this Lease executed by electronic signature shall have the same force and effect as copies hereof executed and delivered with original wet signatures. All parties hereto may rely upon emailed or electronic signatures as if such signatures were original wet signatures. Any party executing and delivering this Lease by email shall promptly thereafter deliver a counterpart signature page of this Lease containing said party's original signature. All parties hereto agree that an emailed signature page or an electronic signature may be introduced into evidence in any proceeding arising out of or related to this Lease as if it were an original wet signature page.

29.28 **Intentionally Omitted.**

29.29 **Transportation Management.** Tenant shall fully comply with all present or future government- mandated programs intended to manage parking, transportation or traffic in and around the Building, and in connection therewith, Tenant shall take responsible action for the transportation planning and management of all employees located at the Premises by working directly with Landlord, any governmental transportation management organization or any other transportation-related committees or entities.

29.30 **No Violation.** Tenant hereby warrants and represents that neither its execution of nor performance under this Lease shall cause Tenant to be in violation of any agreement, instrument, contract, law, rule or regulation by which Tenant is bound, and Tenant shall protect, defend, indemnify and hold Landlord harmless against any claims, demands, losses, damages, liabilities, costs and expenses, including, without limitation, reasonable attorneys' fees and costs, arising from Tenant's breach of this warranty and representation.

29.31 **Communications and Computer Lines.** Tenant may install, maintain, replace, remove or use any communications or computer wires and cables (collectively, the "**Lines**") at the Project in or serving the Premises, provided that (i) Tenant shall obtain Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed, use an experienced and qualified contractor approved in writing by Landlord, and comply with all of the other provisions of Articles 7 and 8 of this Lease, (ii) an acceptable number of spare Lines and space for additional Lines shall be maintained for existing and future occupants of the Project, as determined in Landlord's reasonable opinion, (iii) the Lines therefor (including riser cables) shall be appropriately insulated to prevent excessive electromagnetic fields or radiation, and shall be surrounded by a protective conduit reasonably acceptable to Landlord, (iv) any new or existing Lines servicing the Premises shall comply with all applicable governmental laws and regulations, (v) as a condition to permitting the installation of new Lines, Landlord may require that Tenant remove existing Lines located in or serving the Premises and repair any damage in connection with such removal, (vi) Tenant shall remove all Lines installed by or on behalf of Tenant, and repair any damage in connection with such removal, upon the expiration or earlier termination of this Lease (and if Tenant fails to complete such removal and/or to repair any damage caused by the removal of such Lines, Landlord may do so and Tenant shall reimburse Landlord for the cost thereof, as an obligation which shall expressly survive termination of this Lease), and (vii) Tenant shall pay all costs in connection therewith, including any fees charged by Landlord for Tenant's use of the Building's telecommunications capacity in excess of Tenant's pro rata share thereof. Landlord reserves the right to require that Tenant remove any Lines located in or serving the Premises which are installed in violation of these provisions, or which are at any time in violation of any laws or represent a dangerous or potentially dangerous condition.

29.32 **Office and Communications Services.**

29.32.1 **The Provider.** Landlord has advised Tenant that certain office and communications services may be offered to tenants of the Building by a concessionaire under contract to Landlord ("**Provider**"). Tenant shall be permitted to contract with Provider for the provision of any or all of such services on such terms and conditions as Tenant and Provider may agree.

29.32.2 **Other Terms.** Tenant acknowledges and agrees that: (i) Landlord has made no warranty or representation to Tenant with respect to the availability of any such services, or the quality, reliability or suitability thereof; (ii) the Provider is not acting as the agent or representative of Landlord in the provision of such services, and Landlord shall have no liability or responsibility for any failure or inadequacy of such services, or any equipment or facilities used in the furnishing thereof, or any act or omission of Provider, or its agents, employees, representatives, officers or contractors; (iii) Landlord shall have no responsibility or liability for the installation, alteration, repair, maintenance, furnishing, operation, adjustment or removal of any such services, equipment or facilities; and (iv) any contract or other agreement between Tenant and Provider shall be independent of this Lease, the obligations of Tenant hereunder, and the rights of Landlord hereunder, and, without limiting the foregoing, no default or failure of Provider with respect to any such services, equipment or facilities, or under any contract or agreement relating thereto, shall have any effect on this Lease or give to Tenant any offset or defense to the full and timely performance of its obligations hereunder, or entitle Tenant to any abatement of rent or additional rent or any other payment required to be made by Tenant hereunder, or constitute any accrual or constructive eviction of Tenant, or otherwise give rise to any other claim of any nature against Landlord.

29.33 **MCAS Miramar.** Tenant hereby acknowledges that the Project lies within the proximity of Marine Corps Air Station Miramar and hereby further acknowledges and agrees that Landlord shall have no liability to Tenant in connection with any noise disturbance or any other disturbances resulting from activities conducted from Marine Corps Air Station Miramar and/or the Project's proximity thereto.

29.34 **Building Renovations.** It is specifically understood and agreed that Landlord has made no representation or warranty to Tenant and has no obligation and has made no promises to alter, remodel, improve, renovate, repair or decorate the Premises, Building, or any part thereof and that no representations respecting the condition of the Premises or the Building have been made by Landlord to Tenant except as specifically set forth herein or in the Tenant Work Letter. However, Tenant hereby acknowledges that Landlord may during the Lease Term renovate, improve, alter, or modify (collectively, the “**Renovations**”) the Project, the Building and/or the Premises including without limitation the parking structure, Common Areas, systems and equipment, roof, and structural portions of the same, which Renovations may include, without limitation, (i) installing sprinklers in the Building Common Areas and tenant spaces, (ii) modifying the Common Areas and tenant spaces to comply with applicable laws and regulations, including regulations relating to the physically disabled, seismic conditions, and building safety and security, and (iii) installing new floor covering, lighting, and wall coverings in the Building Common Areas. Tenant acknowledges that there may be inconveniences associated with the Renovations, such as noise, dust, debris and obstruction of access, and in connection with the Renovations, Landlord may, among other things, erect scaffolding or other necessary structures in the Building, and/or limit or eliminate access to portions of the Project, including portions of the Common Areas. Tenant hereby agrees that such Renovations and Landlord’s actions in connection with such Renovations shall in no way constitute a constructive eviction of Tenant nor entitle Tenant to any abatement of Rent, except as expressly provided in Section 6.4 above. Landlord shall have no responsibility or for any reason be liable to Tenant for any direct or indirect injury to or interference with Tenant’s business arising from the Renovations, nor shall Tenant be entitled to any compensation or damages from Landlord for loss of the use of the whole or any part of the Premises or of Tenant’s personal property or improvements resulting from the Renovations or Landlord’s actions in connection with such Renovations, or for any inconvenience or annoyance occasioned by such Renovations or Landlord’s actions.

29.35 **Unrelated Business Transaction Income.** If Landlord is advised by its counsel that all or any portion of the monies paid by Tenant to Landlord hereunder are, or may be deemed to be, unrelated business income within the meaning of the United State Internal Revenue Code or regulations issued thereunder, Tenant agrees that it will execute all commercially reasonable documents or instruments necessary to eliminate the potential for unrelated business income, provided that no such document or instrument shall result in Tenant having to pay in the aggregate more money on account of its occupancy of the Premises under the terms of this Lease, as so amended, and provided further that no such amendment shall result in Tenant having greater obligations or receiving less services than it was previously obligated for or entitled to receive under this Lease, or services of a lesser quality.

29.36 **Inspection by a CASp in Accordance with Civil Code Section 1938.** Pursuant to California Civil Code § 1938, Landlord hereby states that the Premises have not undergone inspection by a Certified Access Specialist (CASp) (defined in California Civil Code § 55.52(a)(3)). Pursuant to Section 1938 of the California Civil Code, Landlord hereby provides the following notification to Tenant: “A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction related accessibility standards within the premises.” If Tenant requests to perform a CASp inspection of the Premises, Tenant shall, at its cost, retain a CASp approved by Landlord (provided that Landlord may designate the CASp, at Landlord’s option) to perform the inspection of the Premises at a time agreed upon by the parties. Tenant shall provide Landlord with a copy of any report or certificate issued by the CASp (the “**CASp Report**”) and Tenant shall, at its cost, promptly complete any modifications necessary to correct violations of construction related accessibility standards identified in the CASp Report, which modifications will be completed as an alteration, notwithstanding anything to the contrary in this Lease. Tenant agrees to keep the information in the CASp Report confidential except as necessary for the Tenant to complete such modifications.

29.37 **Antenna.** Tenant shall have the right to enter into a license agreement with Landlord, in the form of Exhibit E attached hereto, which license agreement shall grant Tenant a license to maintain one (1) GPS antenna or satellite dish connected to the Premises for television or radio reception, of less than twenty-four inches (24”) in diameter, upon such portion of the rooftop of the Building as is designated by Landlord, subject to Tenant’s compliance with the reasonable rules and regulations promulgated by Landlord, from time to time, with respect to use of, and access to, the rooftop of the Building. As more particularly set forth in Exhibit E attached hereto, Tenant

must pay for the maintenance and repair of the antenna, satellite dish and/or other equipment placed upon such licensed portion of the Building's rooftop (collectively, "**Antenna Facilities**"), as well as all utilities used to operate such Antenna Facilities. Except in the event of an emergency, Tenant covenants to repair, maintain and remove its Antenna Facilities during normal business hours. The installation of Tenant's Antenna Facilities shall be engineered by Landlord's engineers at Tenant's sole cost and expense. Such installation of Tenant's Antenna Facilities, including the aesthetic compatibility of such Antenna Facilities with the design and appearance of the Building and the height and weight of the Antenna Facilities, shall be subject to Landlord's approval.

[Signatures on Following Page]

“Landlord”: HSPF LA JOLLA COMMONS I INVESTORS LLC,
a Delaware limited liability company

By: HSPF La Jolla Commons Campus Investors LLC,
a Delaware limited liability company,
its sole member

By: SPF La Jolla Commons Campus Acquisition LLC,
a Delaware limited liability company,
its sole member

By: Commingled Pension Trust Fund (Strategic Property)
of JPMorgan Chase Bank, N.A., a trust governed by the
laws of the State of New York,
its sole member

By: JPMorgan Chase Bank, N.A.,
not individually, but solely in its capacity
as trustee

By: /s/ Lauren Graham

Lauren Graham
Executive Director, Real Estate

“Tenant”: ARTIVA BIOTHERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Thomas Farrell

Its: President & CEO
Date Signed: 6/13/19

By: /s/ Peter Flynn

Its: CTO
Date Signed: 6/13/19

EXHIBIT A

OUTLINE OF PREMISES

FLOOR 11

SUITE 1150
13,405 RSF
Vacant
Second Generation



EXHIBIT A

-1-

Artiva Biotherapeutics, Inc.

EXHIBIT B

TENANT WORK LETTER

Landlord has constructed, at its sole cost and expense, the Base, Shell and Core (i) of the Premises, and (ii) of the floor of the Building on which the Premises are located. This Tenant Work Letter shall set forth the terms and conditions relating to the construction of tenant improvements in the Premises. This Tenant Work Letter is essentially organized chronologically and addresses the issues of the construction of the Premises, in sequence, as such issues will arise during the actual construction of the Premises. All capitalized terms used but not defined herein shall have the meanings given such terms in this Lease. All references in this Tenant Work Letter to Articles or Sections of "this Lease" shall mean the relevant portion of the Lease to which this Tenant Work Letter is attached as Exhibit B and of which this Tenant Work Letter forms a part, and all references in this Tenant Work Letter to Sections of "this Tenant Work Letter" shall mean the relevant portion of this Tenant Work Letter.

SECTION 1

SPACE PLAN; CONSTRUCTION OF IMPROVEMENTS

Landlord and Tenant have approved the space plan for the Premises dated April 3, 2019 attached hereto as Schedule 1 (the "**Space Plan**"). Landlord, at Landlord's cost and expense, shall construct improvements affixed to the Premises on a turnkey basis pursuant to the Space Plan to include both the building standard finishes and the alternates (except that carpets shall be replaced in private offices), and as described on Schedule 2 attached hereto (the "**Tenant Improvements**"); provided that the Tenant Improvements shall not include furniture, fixtures, equipment or other personal property. Landlord shall construct the Tenant Improvements in accordance with all applicable Laws, including, without limitation, the Americans with Disabilities Act, as amended (the ADA). Landlord and Tenant acknowledge that the Space Plan is subject to modification if necessary in order to obtain all applicable governmental permits and approvals. Unless specifically noted to the contrary on the Space Plan or Schedule 2, the Tenant Improvements shall be constructed using Building-standard specifications and materials.

SECTION 2

TENANT'S EARLY ACCESS

Tenant shall have the right to enter the Premises at least thirty (30) days prior to Substantial Completion of the Tenant Improvements for the purpose of installing, at Tenant's expense, Tenant's equipment, furniture and furnishings as allowed by the building and fire departments, provided neither Tenant nor its employees, contractors, agents or representatives shall delay or interfere in any way with Landlord's or its contractors' or subcontractors' completion of the Tenant Improvements. All such activities by Tenant shall be scheduled and coordinated through Landlord and its contractors and Tenant shall be responsible for all damage to the Premises caused by its entry. Landlord shall have no liability for any injury to Tenant's employees, contractors, agents or representatives, or for damage to any property of Tenant, its employees, contractors, agents or representatives occurring prior to the Lease Commencement Date except to the extent caused by negligence or willful misconduct of Landlord, its employees, contractors or agents. Such entry by Tenant shall not be deemed to affect the Lease Commencement Date within the meaning of Section 2.1 of the Lease.

SECTION 3

ACCEPTANCE OF PREMISES; CONTRACTOR'S WARRANTIES AND GUARANTIES

By entering into possession of the Premises or any part thereof and except for such matters as Tenant shall specify to Landlord in writing within thirty (30) days thereafter, Tenant shall be conclusively deemed to have accepted the Premises and to have agreed that Landlord has performed all of its obligations hereunder with respect to the Premises and that the Premises are in satisfactory condition and in full compliance with the requirements of this Lease as of the date of such possession. After the expiration of such 30-day period, if Tenant encounters any latent defects in the Tenant Improvements during the 1-year period following Tenant's taking possession of the Premises, Tenant shall notify Landlord thereof and Landlord shall cause to be assigned to Tenant all warranties and guaranties by the contractor who constructs the Tenant Improvements (the "**Contractor**") relating to the Tenant

EXHIBIT B

Improvements, and Tenant shall look solely to the Contractor for correction of such latent defects. Such warranties and guaranties of Contractor shall guarantee that the Tenant Improvements shall be free from any defects in workmanship and materials for a period of not less than one (1) year from the date of completion thereof.

SECTION 4 LEASE COMMENCEMENT DATE

Subject to Force Majeure and Tenant Delays (as hereinafter defined), Landlord shall use best efforts to cause Substantial Completion of the Premises to occur by the Target Commencement Date. Except as provided in this Section 4, the Lease Commencement Date shall occur as set forth in Article 2 of the Lease. If there shall be a delay or there are delays in the Substantial Completion of the Premises (based upon the anticipated date of the occurrence of the Lease Commencement Date as set forth in Article 2 of the Lease) as a direct, indirect, partial, or total result of any of the following (collectively, “**Tenant Delays**”):

4.2.1 Tenant’s failure to timely approve any matter requiring Tenant’s approval;

4.2.2 A breach by Tenant of the terms of this Tenant Work Letter or the Lease;

4.2.3 Any other acts or omissions of Tenant, or its agents, or employees; or

4.2.4 Tenant’s access of the Premises pursuant to Section 2 above;

then, notwithstanding anything to the contrary set forth in the Lease or this Tenant Work Letter and regardless of the actual date of the Substantial Completion of the Premises, the date of Substantial Completion (for purposes of determining the Lease Commencement Date) shall be deemed to be the date Substantial Completion of the Premises would have occurred if no Tenant Delays, as set forth above, had occurred; provided that except as set forth in Section 4.2.5 above, no Tenant Delay shall be deemed to have occurred unless and until Landlord has provided written notice to Tenant specifying the action or inaction that Landlord contends constitutes a Tenant Delay. If such action or inaction is not cured or terminated within one (1) business day after receipt of such notice, then a Tenant Delay shall be deemed to have occurred commencing as of the date such notice is received and continuing for the number of days that the Substantial Completion of the Tenant Improvements was, in fact, delayed, as a result of such Tenant Delay.

SECTION 5 MISCELLANEOUS

5.1 Tenant’s Representative. Tenant has designated Thomas J Farrell as its sole representative with respect to the matters set forth in this Tenant Work Letter, who, until further notice to Landlord, shall have full authority and responsibility to act on behalf of the Tenant as required in this Tenant Work Letter.

5.2 Landlord’s Representative. Landlord has designated Carla Alexander as its sole representative with respect to the matters set forth in this Tenant Work Letter, who, until further notice to Tenant, shall have full authority and responsibility to act on behalf of the Landlord as required in this Tenant Work Letter.

5.3 Tenant’s Agents. All subcontractors, laborers, materialmen, and suppliers retained directly by Tenant (such subcontractors, laborers, materialmen and suppliers to be known collectively as “**Tenant’s Agents**”), shall all be subject to Landlord’s reasonable approval and, if deemed necessary by Landlord to maintain harmony among other labor at the Project or if required by law or any agreement to which Landlord is bound, shall be union labor.

5.4 Insurance Requirements. All of Tenant’s Agents shall carry liability and Products and Completed Operation Coverage insurance, each in amounts not less than \$500,000 per incident, \$1,000,000 in aggregate, and in form and with companies as are required to be carried by Tenant as set forth in Article 10 of this Lease, and the policies therefor shall insure Landlord and Tenant, as their interests may appear, as well as Landlord’s contractor, and shall name as additional insureds all mortgagees of the Project or any other party designated by Landlord. All

EXHIBIT B

insurance maintained by Tenant's Agents shall preclude subrogation claims by the insurer against anyone insured thereunder. Such insurance shall provide that it is primary insurance as respects the Landlord and that any other insurance maintained by Landlord is excess and noncontributing with the insurance required hereunder.

5.5 Time is of the Essence in This Tenant Work Letter. Unless otherwise indicated, all references herein to a "number of days" shall mean and refer to calendar days. In all instances where Tenant is required to approve or deliver an item, if no written notice of approval is given or the item is not delivered within the stated time period, at Landlord's sole option, at the end of such period the item shall automatically be deemed approved or delivered by Tenant and the next succeeding time period shall commence.

5.6 Tenant's Lease Default. Notwithstanding any provision to the contrary contained in this Lease, if an event of default as described in Section 19.1 of the Lease, or a default by Tenant under this Tenant Work Letter, has occurred at any time on or before the Substantial Completion of the Premises, then (i) in addition to all other rights and remedies granted to Landlord pursuant to this Lease, Landlord shall have the right to cause its contractor to cease the construction of the Premises (in which case, Tenant shall be responsible for any delay in the Substantial Completion of the Premises caused by such work stoppage as set forth in Section 4 of this Tenant Work Letter), and (ii) all other obligations of Landlord under the terms of this Tenant Work Letter shall be forgiven until such time as such default is cured pursuant to the terms of this Lease.

EXHIBIT B

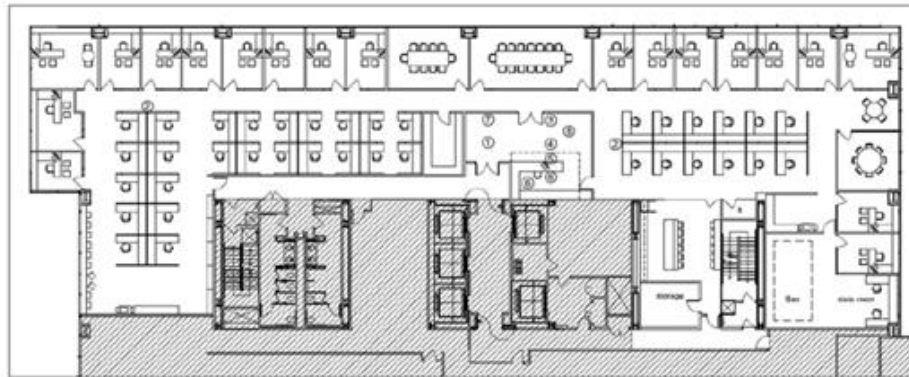
-3-

Artiva Biotherapeutics, Inc.

SCHEDULE 1

SPACE PLAN

Mutually Agree Upon Space Plan, Suite 1150 – 13,405 RSF



GENERAL NOTES

1. HVAC CONTROLS TO BE LOCATED IN OLD OFFICE AND CONFERENCE ROOMS
2. EXISTING WINDOW FILM TO BE REMOVED THROUGHOUT
3. ALL EXTERIOR WINDOWS TO HAVE ROLLER SHADES TO MATCH EXISTING
4. RELOCATE DESIGNATED HVAC TO NEW IT ROOM LOCATION

FLOORING FINISH

CARPET – PRIVATE OFFICES, CONFERENCE ROOMS, & CUBICLE AREAS
POLISHED CONCRETE – RECEPTION AREA AND HALLWAYS
LVP – BREAK AREA
LVT – IT & STORAGE

1. ALTERNATE: EXISTING CARPET IN PRIVATE OFFICES TO REMAIN

KEY NOTES

1. ~~RELOCATE RECEPTION AREA TO VESTIBULE AT BUILDING LOBBY~~
2. PROVIDE FLOOR COVERS FOR "ISLAND" CUBICLE PLANS
3. GLASS HINGED DOUBLE DOORS
4. HARD-PLU CEILING WITH RECESSED LIGHTING AT RECEPTION AREA
5. DROPPED HARD-PLU CEILING DIRECTLY OVER RECEPTIONIST DESK
6. RELOCATE EXISTING ELECTRICAL PANELS AS REQUIRED
7. PROVIDE WALL-WASHED LIGHTING AT ENTRY WALL
8. PROVIDE PENDANT LIGHTING IN THIS LOCATION

LJC: 11TH FLOOR

Hines

scale: 1/16" = 1' - 0"
04.03.2019

L7 studio architects

SCHEDULE 1

-1-

Artiva Biotherapeutics, Inc.

SCHEDULE 2

Description of Tenant Improvements

- (1) Flooring
 - a. Reception – polished concrete (consistent with concrete floors in Suite 240)
 - b. Hallways between private offices and workstation areas – polished concrete
 - c. Private offices/conference rooms – new building standard carpet squares
 - d. Workstation areas – new building standard carpet squares
 - e. Kitchen/breakroom – building standard luxury vinyl plank
 - f. IT/storage – building standard luxury vinyl tile
 - g. Data room – building standard luxury vinyl tile to right/west of entry door (for file cabinets) and carpet along walkway into data room area, private office and workstation area in the data room
- (2) Light Fixtures
 - a. Reception – recessed “can” lights (6) in hard lid ceiling with (3) wall washers on main logo wall, and (3) pendant lights over reception counter and above guest seating area per Schedule 1 (the space plan)
 - b. Existing private offices & conference rooms – existing light fixtures to remain, any damaged units to be repaired
 - c. All other areas except Board room hallway (item 4 below) – new building standard Title 24 compliant light fixtures
- (3) Reception
 - a. Build-in L-shaped reception desk with quartz countertop and wood veneer fascia to match board room cabinets plus low, wall length credenza behind reception desk (\$15k allowance)
 - b. Matching double herculite doors leading from reception into rest of premises with electronic lock ready to be tied into tenant’s access control system (tenant security vendor to provide magnetic lock – GC to prep door and provide electrical for card reader)
 - c. Side door next to reception desk – install electronic lock ready to be tied into access control system (tenant security vendor to provide lock – GC to prep door and provide electrical for card reader)
 - d. Relocate existing electrical panel into non-descript area that is not noticeable
- (4) Hallway in front of board room
 - a. Consistent ceiling system – new consistent hard lid matching reception, OK to leave in the “channel” feature
 - b. Recessed “can” light fixtures along hallway
- (5) Kitchen
 - a. Build-in upper/lower cabinets with quartz countertop
 - b. Dishwasher
 - c. Double sink with garbage disposal
 - d. Plumbing for water filter, coffee maker, ice maker
 - e. Outlets for appliances
 - f. No freestanding island or wall seating required, do not build the built-in table/seating as shown
- (6) Windows
 - a. All exterior windows to have matching roller shades
 - b. Window film on private offices to be removed selectively (wait for specific removal instructions from Tenant once tenant improvements are underway)

SCHEDULE 2

(7) Ceilings

- a. Existing ceilings in private offices to remain, replace any defective or damaged tiles
- b. Hard lid ceiling in reception area
- c. Remainder of ceilings to be consistent acoustic tile system matching existing on west side of suite

(8) Open Office Areas

- a. No millwork is required on west side window, do not build the hoteling counter as shown in space plan
- b. Floor cores throughout to support workstation layout as shown (assumed 4 floor core & 4 wall furniture feeds)
- c. Additional floor cores to support two-sided work bench (tenant supplied) along west side window

(9) Doors

- a. All private office and conference room doors to be matching full height doors (existing)
- b. Single herculite doors separating kitchen from office area
- c. Solid core doors for reception side door, storage rooms, IT room, entrance to data room
- d. Matching double herculite doors leading from reception into rest of premises with electronic lock ready to be tied into tenant's access control system (tenant security vendor to provide magnetic lock – GC would prep door and provide electrical for card reader)

(10) Millwork

- a. Re-use existing upper and lower cabinets from existing work/kitchen area in new east work area per drawing (new laminate counter acceptable for the east work area) (dependent upon successful removal of millwork without damage)

NOTE: Quality of materials and finishes to be per Building standard as shown, with Tenant allowed to select different color palette for walls and carpets.



EXHIBIT C

NOTICE OF LEASE TERM DATES

To: _____

Re: Office Lease dated _____, 20 between HSPF LA JOLLA COMMONS I INVESTORS LLC, a Delaware limited liability company ("**Landlord**"), and _____, a _____ ("**Tenant**") concerning Suite _____ on floor(s) _____ of the office building located at _____, _____, California.

Ladies and gentlemen:

In accordance with the Office Lease (the "**Lease**"), we wish to advise you and/or confirm as follows:

1. The Lease Term shall commence on or has commenced on _____ for a term of _____ ending on _____.
2. Rent commenced to accrue on _____, in the amount of _____.
3. If the Lease Commencement Date is other than the first day of the month, the first billing will contain a pro rata adjustment. Each billing thereafter, with the exception of the final billing, shall be for the full amount of the monthly installment as provided for in the Lease.
4. Your rent checks should be made payable to _____ at _____.

EXHIBIT C

“Landlord”: HSPF LA JOLLA COMMONS I INVESTORS LLC,
a Delaware limited liability company

By: HSPF La Jolla Commons Campus Investors LLC,
a Delaware limited liability company,
its sole member

By: SPF La Jolla Commons Campus Acquisition LLC,
a Delaware limited liability company,
its sole member

By: Commingled Pension Trust Fund (Strategic Property)
of JPMorgan Chase Bank, N.A., a trust governed by the
laws of the State of New York,
its sole member

By: JPMorgan Chase Bank, N.A., not individually,
but solely in its capacity as trustee

By: _____
Name: _____
Title: _____

Agreed to and Accepted
as of _____, 20 ____.

“Tenant”:

a _____

By: _____
Its: _____

EXHIBIT C

EXHIBIT D

RULES AND REGULATIONS

Tenant shall faithfully observe and comply with the following Rules and Regulations. Landlord shall not be responsible to Tenant for the nonperformance of any of said Rules and Regulations by or otherwise with respect to the acts or omissions of any other tenants or occupants of the Project. In the event of any conflict between the Rules and Regulations and the other provisions of this Lease, the latter shall control. Any consent, approval or waiver required of Landlord hereunder shall not be unreasonably withheld, delayed or conditioned.

1. Tenant shall not alter any lock or install any new or additional locks or bolts on any doors or windows of the Premises without obtaining Landlord's prior written consent. Tenant shall bear the cost of any lock changes or repairs required by Tenant. Two keys will be furnished by Landlord for the Premises, and any additional keys required by Tenant must be obtained from Landlord at a reasonable cost to be established by Landlord. Upon the termination of this Lease, Tenant shall restore to Landlord all keys of stores, offices, and toilet rooms, either furnished to, or otherwise procured by, Tenant and in the event of the loss of keys so furnished, Tenant shall pay to Landlord the cost of replacing same or of changing the lock or locks opened by such lost key if Landlord shall deem it necessary to make such changes.

2. All doors opening to public corridors shall be kept closed at all times except for normal ingress and egress to the Premises.

3. Landlord reserves the right to close and keep locked all entrance and exit doors of the Building during such hours as are customary for comparable buildings in the UTC area of San Diego. Tenant, its employees and agents must be sure that the doors to the Building are securely closed and locked when leaving the Premises if it is after the normal hours of business for the Building. Any tenant, its employees, agents or any other persons entering or leaving the Building at any time when it is so locked, or any time when it is considered to be after normal business hours for the Building, may be required to sign the Building register. Access to the Building may be refused unless the person seeking access has proper identification or has a previously arranged pass for access to the Building. Landlord will furnish passes to persons for whom Tenant requests same in writing. Tenant shall be responsible for all persons for whom Tenant requests passes and shall be liable to Landlord for all acts of such persons. The Landlord and his agents shall in no case be liable for damages for any error with regard to the admission to or exclusion from the Building of any person. In case of invasion, mob, riot, public excitement, or other commotion, Landlord reserves the right to prevent access to the Building or the Project during the continuance thereof by any means it deems appropriate for the safety and protection of life and property.

4. No furniture, freight or equipment of any kind shall be brought into the Building without prior notice to Landlord. All moving activity into or out of the Building shall be scheduled with Landlord and done only at such time and in such manner as Landlord designates. Landlord shall have the right to prescribe the weight, size and position of all safes and other heavy property brought into the Building and also the times and manner of moving the same in and out of the Building. Safes and other heavy objects shall, if considered necessary by Landlord, stand on supports of such thickness as is necessary to properly distribute the weight. Landlord will not be responsible for loss of or damage to any such safe or property in any case. Any damage to any part of the Building, its contents, occupants or visitors by moving or maintaining any such safe or other property shall be the sole responsibility and expense of Tenant.

5. No furniture, packages, supplies, equipment or merchandise will be received in the Building or carried up or down in the elevators, except between such hours established by Landlord from time to time, in such specific elevator and by such personnel as shall be designated by Landlord.

6. The requirements of Tenant will be attended to only upon application at the management office for the Project or at such office location designated by Landlord. Employees of Landlord shall not perform any work or do anything outside their regular duties unless under special instructions from Landlord.

EXHIBIT D

-1-

Artiva Biotherapeutics, Inc.

7. No sign, advertisement, notice or handbill shall be exhibited, distributed, painted or affixed by Tenant on any part of the Premises or the Building without the prior written consent of the Landlord. Tenant shall not disturb, solicit, peddle, or canvass any occupant of the Project and shall cooperate with Landlord and its agents of Landlord to prevent same.

8. The toilet rooms, urinals, wash bowls and other apparatus shall not be used for any purpose other than that for which they were constructed, and no foreign substance of any kind whatsoever shall be thrown therein. The expense of any breakage, stoppage or damage resulting from the violation of this rule shall be borne by the tenant who, or whose servants, employees, agents, visitors or licensees shall have caused same.

9. Tenant shall not overload the floor of the Premises, nor mark, drive nails or screws, or drill into the partitions, woodwork or drywall or in any way deface the Premises or any part thereof without Landlord's prior written consent.

10. Except for vending machines intended for the sole use of Tenant's employees and invitees, no vending machine or machines other than fractional horsepower office machines shall be installed, maintained or operated upon the Premises without the written consent of Landlord.

11. Tenant shall not use or keep in or on the Premises, the Building, or the Project any kerosene, gasoline, explosive material, corrosive material, material capable of emitting toxic fumes, or other inflammable or combustible fluid chemical, substitute or material. Tenant shall provide material safety data sheets for any Hazardous Material used or kept on the Premises.

12. Tenant shall not without the prior written consent of Landlord use any method of heating or air conditioning other than that supplied by Landlord.

13. Tenant shall not use, keep or permit to be used or kept, any foul or noxious gas or substance in or on the Premises, or permit or allow the Premises to be occupied or used in a manner offensive or objectionable to Landlord or other occupants of the Project by reason of noise, odors, or vibrations, or interfere with other tenants or those having business therein, whether by the use of any musical instrument, radio, phonograph, or in any other way. Tenant shall not throw anything out of doors, windows or skylights or down passageways.

14. Tenant shall not bring into or keep within the Project, the Building or the Premises any animals, birds, fish, aquariums, or, except in areas designated by Landlord, bicycles or other vehicles.

15. No cooking shall be done or permitted on the Premises, nor shall the Premises be used for the storage of merchandise, for lodging or for any improper, objectionable or immoral purposes. Notwithstanding the foregoing, Underwriters' laboratory-approved equipment and microwave ovens may be used in the Premises for heating food and brewing coffee, tea, hot chocolate and similar beverages for employees and visitors, provided that such use is in accordance with all applicable federal, state, county and city laws, codes, ordinances, rules and regulations.

16. The Premises shall not be used for manufacturing or for the storage of merchandise except as such storage may be incidental to the use of the Premises provided for in the Summary. Tenant shall not occupy or permit any portion of the Premises to be occupied as an office for a messenger-type operation or dispatch office, public stenographer or typist, or for the manufacture or sale of liquor, narcotics, or tobacco in any form, or as a medical office, or as a barber or manicure shop, or as an employment bureau without the express prior written consent of Landlord. Tenant shall not engage or pay any employees on the Premises except those actually working for such tenant on the Premises nor advertise for laborers giving an address at the Premises.

17. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs, or who shall in any manner do any act in violation of any of these Rules and Regulations.

EXHIBIT D

-2-

Artiva Biotherapeutics, Inc.

18. Tenant, its employees and agents shall not loiter in or on the entrances, corridors, sidewalks, lobbies, courts, halls, stairways, elevators, vestibules or any Common Areas for the purpose of smoking tobacco products or for any other purpose, nor in any way obstruct such areas, and shall use them only as a means of ingress and egress for the Premises. "Smoking" as used in this Exhibit D, shall be deemed to include the use of e-cigarettes, smokeless cigarettes and other similar products. All rules and regulations set forth in this Exhibit D applicable to smoking also apply to the use of e-cigarettes, smokeless cigarettes and other similar products.

19. Tenant shall not waste electricity, water or air conditioning and agrees to cooperate fully with Landlord to ensure the most effective operation of the Building's heating and air conditioning system, and shall refrain from attempting to adjust any controls. Tenant shall participate in recycling programs undertaken by Landlord.

20. Tenant shall store all its trash and garbage within the interior of the Premises. No material shall be placed in the trash boxes or receptacles if such material is of such nature that it may not be disposed of in the ordinary and customary manner of removing and disposing of trash and garbage in San Diego, California without violation of any law or ordinance governing such disposal. All trash, garbage and refuse disposal shall be made only through entry-ways and elevators provided for such purposes at such times as Landlord shall designate. Tenant shall make alternate arrangements, at Tenant's cost, for the disposal of high volumes of trash in excess of the amount determined by Landlord to be an office tenant's typical volume of trash (i.e., excessive moving boxes or shipping materials). If the Premises is or becomes infested with vermin as a result of the use or any misuse or neglect of the Premises by Tenant, its agents, servants, employees, contractors, visitors or licensees, Tenant shall forthwith, at Tenant's expense, cause the Premises to be exterminated from time to time to the satisfaction of Landlord and shall employ such licensed exterminators as shall be approved in writing in advance by Landlord.

21. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any governmental agency.

22. Any persons employed by Tenant to do janitorial work shall be subject to the prior written approval of Landlord, and while in the Building and outside of the Premises, shall be subject to and under the control and direction of the Building manager (but not as an agent or servant of such manager or of Landlord), and Tenant shall be responsible for all acts of such persons.

23. No awnings or other projection shall be attached to the outside walls of the Building without the prior written consent of Landlord, and no curtains, blinds, shades or screens shall be attached to or hung in, or used in connection with, any window or door of the Premises other than Landlord standard drapes. All electrical ceiling fixtures hung in the Premises or spaces along the perimeter of the Building must be fluorescent and/or of a quality, type, design and a warm white bulb color approved in advance in writing by Landlord. Neither the interior nor exterior of any windows shall be coated or otherwise sunscreens without the prior written consent of Landlord. Tenant shall be responsible for any damage to the window film on the exterior windows of the Premises and shall promptly repair any such damage at Tenant's sole cost and expense. Tenant shall keep its window coverings closed during any period of the day when the sun is shining directly on the windows of the Premises. Prior to leaving the Premises for the day, Tenant shall draw or lower window coverings and extinguish all lights. Tenant shall abide by Landlord's regulations concerning the opening and closing of window coverings which are attached to the windows in the Premises, if any, which have a view of any interior portion of the Building or Common Areas.

24. The sashes, sash doors, skylights, windows, and doors that reflect or admit light and air into the halls, passageways or other public places in the Building shall not be covered or obstructed by Tenant, nor shall any bottles, parcels or other articles be placed on the windowsills.

25. Tenant must comply with requests by the Landlord concerning the informing of their employees of items of importance to the Landlord.

26. Tenant must comply with all applicable "**NO-SMOKING**" or similar ordinances. If Tenant is required under the ordinance to adopt a written smoking policy, a copy of said policy shall be on file in the office of the Building.

EXHIBIT D

27. Tenant hereby acknowledges that Landlord shall have no obligation to provide guard service or other security measures for the benefit of the Premises, the Building or the Project. Tenant hereby assumes all responsibility for the protection of Tenant and its agents, employees, contractors, invitees and guests, and the property thereof, from acts of third parties, including keeping doors locked and other means of entry to the Premises closed, whether or not Landlord, at its option, elects to provide security protection for the Project or any portion thereof. Tenant further assumes the risk that any safety and security devices, services and programs which Landlord elects, in its sole discretion, to provide may not be effective, or may malfunction or be circumvented by an unauthorized third party, and Tenant shall, in addition to its other insurance obligations under this Lease, obtain its own insurance coverage to the extent Tenant desires protection against losses related to such occurrences. Tenant shall cooperate in any reasonable safety or security program developed by Landlord or required by law.

28. All office equipment of any electrical or mechanical nature shall be placed by Tenant in the Premises in settings approved by Landlord, to absorb or prevent any vibration, noise and annoyance.

29. Tenant shall not use in any space or in the public halls of the Building, any hand trucks except those equipped with rubber tires and rubber side guards.

30. No auction, liquidation, fire sale, going-out-of-business or bankruptcy sale shall be conducted in the Premises without the prior written consent of Landlord.

31. No tenant shall use or permit the use of any portion of the Premises for living quarters, sleeping apartments or lodging rooms.

32. Tenant shall not purchase spring water, towels, janitorial or maintenance or other similar services from any company or persons not approved by Landlord. Landlord shall approve a sufficient number of sources of such services to provide Tenant with a reasonable selection, but only in such instances and to such extent as Landlord in its judgment shall consider consistent with the security and proper operation of the Building.

33. Tenant shall install and maintain, at Tenant's sole cost and expense, an adequate, visibly marked and properly operational fire extinguisher next to any duplicating or photocopying machines or similar heat producing equipment, which may or may not contain combustible material, in the Premises.

34. Tenant shall not permit any portion of the Project, including the Parking Facilities, to be used for the washing, detailing or other cleaning of automobiles.

Landlord reserves the right at any time to change or rescind any one or more of these Rules and Regulations, or to make such other and further reasonable Rules and Regulations as in Landlord's judgment may from time to time be necessary for the management, safety, care and cleanliness of the Premises, Building, the Common Areas and the Project, and for the preservation of good order therein, as well as for the convenience of other occupants and tenants therein, provided that such rules shall be commercially reasonable and non-discriminatory. Landlord may waive any one or more of these Rules and Regulations for the benefit of any particular tenants, but no such waiver by Landlord shall be construed as a waiver of such Rules and Regulations in favor of any other tenant, nor prevent Landlord from thereafter enforcing any such Rules or Regulations against any or all tenants of the Project. Tenant shall be deemed to have read these Rules and Regulations and to have agreed to abide by them as a condition of its occupancy of the Premises.

EXHIBIT D

EXHIBIT E

FORM OF ROOFTOP AREA LICENSE AGREEMENT

This ROOFTOP AREA LICENSE AGREEMENT (this “**Agreement**”) is entered into as of _____, 20__ (the “**Effective Date**”), by and between HSPF LA JOLLA COMMONS I INVESTORS LLC, a Delaware limited liability company (“**Landlord**”), and ARTIVA BIOTHERAPEUTICS, INC., a Delaware corporation (“**Tenant**”).

RECITALS:

This Agreement is made with regard to the following facts:

A. Landlord and Tenant are parties to that certain Office Lease dated as of _____, 20__ (the “**Lease**”), for certain Premises in the Building located at 4747 Executive Drive, San Diego, California, all as more particularly described in the Lease. Capitalized terms not otherwise defined herein have the meanings set forth in the Lease.

B. In connection with the Lease, Tenant desires to use an area located on the roof of the Building for the purpose of constructing, installing, operating, repairing, replacing and maintaining [a satellite dish antenna of up to 24” in diameter, together with associated conduit and wiring – *modify this description as necessary per deal terms*] as described in Schedule 1 attached hereto (collectively referred to herein as the “**Antenna**”). Landlord has agreed to permit Tenant to use those areas and to construct, install, operate, repair, replace, and maintain the Antenna at Tenant’s sole cost and expense, subject to and upon the terms and conditions set forth hereinbelow.

AGREEMENT:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. License of Rooftop Area.

1.1 Location. Landlord has designated an area on the roof of the Building as shown on Exhibit “A” attached hereto (the “**Rooftop Area**”) that Tenant may use for the purpose of constructing, installing, operating, repairing, replacing and maintaining the Antenna, subject to the terms and conditions of this Agreement including, without limitation, Section 3 below.

1.2 Effectiveness. This Agreement shall be effective upon the Effective Date, and shall continue in effect until the expiration or earlier termination of this Agreement as set forth in Section 1.3 below. Tenant may exercise its right to commence use of the Rooftop Area pursuant to this Agreement upon five (5) business days’ prior written notice delivered to Landlord (the “**Notice of Exercise**”).

1.3 License to use the Rooftop Area; Term; Exclusive Use. Five (5) business days following the delivery of the Notice of Exercise, Tenant’s license to use the Rooftop Area to construct, install, operate, repair, replace (subject to Section 3 of this Agreement) and maintain the Antenna shall commence and shall continue until the earlier of (i) the expiration or earlier termination of the Lease, (ii) any termination of this Agreement required by law, governmental authority or quasi-governmental authority or due to a default as provided in Section 6 below, or (iii) the effective date set forth in a written notice from Tenant to Landlord electing to terminate this Agreement (which such effective date must be at least thirty (30) days after the date of such written notice). Subject to the rights of Landlord to maintain, operate and repair the Building, Tenant shall have the exclusive right to use the Rooftop Area. Landlord shall have the right to use, and to grant to third parties the right to use, the Building riser system and the roof of the Building, other than the Rooftop Area. Tenant shall upon no less than ten (10) days notice from Landlord, temporarily remove antennae from the rooftop to allow rooftop coating maintenance work for a period not to exceed five (5) days once every five (5) years. Landlord shall reimburse Tenant for the actual out-of-pocket cost of any such temporary removal promptly after written request from Tenant together with reasonable evidence of the costs incurred.

EXHIBIT E

-1-

Artiva Biotherapeutics, Inc.

1.4 Access to Antenna. During the term of this Agreement, Tenant, its agents, employees and contractors, will have the right of access to the Antenna and the Rooftop Area, upon at least one (1) business day's prior written notice to Landlord. In the event of an emergency, Tenant shall notify Landlord of such emergency and, thereafter, Landlord shall use its commercially reasonable efforts to respond to the access needs of Tenant.

1.5 Ownership and Removal of Antenna; Restoration. The Antenna shall at all times remain the property of Tenant. Tenant shall have the right to remove the Antenna at any reasonable time upon at least ten (10) days' prior written notice to Landlord; provided that in the event of an emergency, Landlord shall use its commercially reasonable efforts to allow Tenant to remove the Antenna upon less notice. On or before the expiration or earlier termination of this Agreement, Tenant will remove, at its sole cost and expense, the Antenna and all related facilities on the Rooftop Area (specifically including, but not limited to, any fencing and barriers securing the Antenna, and any connections installed by or on behalf of Tenant), and fully and completely restore the Rooftop Area to its condition existing prior to Tenant's installation of the Antenna (except for normal wear and tear). Tenant shall repair any damage caused by the removal of the Antenna. If Tenant fails to complete such removal and restoration or fails to repair any damage caused by the removal, Landlord may (at Landlord's option and without limiting any other remedies available to Landlord) complete such removal, restoration and repair itself and charge the cost thereof to Tenant, which amount shall be paid by Tenant to Landlord within ten (10) days of invoice therefor, as an obligation which shall expressly survive termination of this Agreement.

1.6 Leaks. Without limiting any other provision of this Agreement, Tenant hereby agrees that it shall be solely responsible for, and in accordance with the provisions of Section 5 agrees to indemnify, defend, protect, and hold Landlord and the "**Landlord Parties**" (as that term is defined in Article 10 of the Lease) harmless from, any leaks which occur in the roof or roof membrane at or adjacent to the Rooftop Area during the term of this Agreement and during the five (5) year period immediately following the Agreement's termination, in either case caused by the installation or removal of the Antenna by Tenant.

2. Rent. Tenant shall pay, as Additional Rent, all costs incurred by Landlord for Tenant's use of Building utilities in connection with the Antenna, including, without limitation, the cost of any electricity, water, gas, or other utilities or services to the Rooftop Area and any new metering that may be necessary to account therefor. In conjunction therewith, Tenant will be billed monthly for electricity consumption in accordance with Section 6.2 of the Lease. In addition, Tenant shall directly pay for all costs in connection with the construction, installation, operation, maintenance, repair, replacement, and insurance of the Antenna in the Rooftop Area.

3. Installation, Maintenance and Operation of Antenna.

3.1 Approvals and Permits. During the term of this Agreement and subject to the terms of Section 3.2, below, Tenant may install and operate the Antenna in the Rooftop Area, provided that: (a) Tenant has obtained Landlord's prior written approval, which approval shall be in Landlord's reasonable discretion, of the plans and specifications for the Antenna and all working drawings for the installation of the Antenna, (b) Tenant has obtained all required permits and governmental or quasi-governmental approvals (including satisfying any applicable Federal Communications Commission and Federal Aviation Administration requirements) to install and operate the Antenna, and (c) Tenant complies with all applicable governmental and quasi-governmental laws, regulations and building codes in connection with the Rooftop Area and the Antenna. Landlord shall have the right to condition its approval of the Antenna proposed to be installed by Tenant on Tenant, among other things, erecting fencing or other barriers to secure such device(s). With regard to Tenant obtaining all required permits and approvals set forth in Section 3.1(b) above, Landlord shall reasonably cooperate, at Tenant's sole cost, with Tenant; provided, however, that Landlord shall not be responsible for any such approvals. Once Landlord has given its requisite approval, Tenant may not materially alter or modify the working drawings, or the actual installation of the Antenna without Landlord's prior written consent, which consent shall not be unreasonably withheld, conditioned or delayed.

EXHIBIT E

-2-

Artiva Biotherapeutics, Inc.

3.2 Compatibility with Building Systems and Operations. The Antenna shall be compatible with the Building systems and equipment and the antennae and other telecommunications devices of Landlord and other tenants located in the Project, and shall not impair window washing or the use of chiller units, the cooling tower, the emergency generator, elevators, machine rooms, helipads, ventilation shafts, if any, or any other parts of the Building. If the installation, maintenance, repair, operation or removal of the Antenna requires any changes or modifications to any structural systems or components of the Building or any of the Building's systems or equipment, Landlord shall have the right to either (i) perform such changes or modifications and Tenant shall pay for the actual costs thereof upon demand or (ii) require Tenant to perform such changes or modifications at Tenant's sole cost and expense. If required by Landlord, in its reasonable discretion, or any governmental agency or authority, Tenant shall fully secure the Rooftop Area with suitable fencing or other required enclosures (including enclosures that shield the visibility of the Rooftop Area without impairing their operation and maintenance), subject to the terms of Section 3.1, above. Landlord shall have the right to post notices of non-responsibility in connection with any work performed by Tenant or its agents or contractors in connection with this Agreement. The terms and conditions of Articles 8 and 9 of the Lease shall specifically be applicable in connection with any work performed by Tenant or its agents or contractors in connection with the Antenna or this Agreement.

4. Use of Rooftop Area. Tenant shall have the right to use the Building electricity located on the roof of the Building for the operation of the Antenna, subject to Tenant's payment therefor as provided in Section 2 above. Tenant will use the Rooftop Area solely for the Antenna, and not for any other purpose. Without limiting the generality of the foregoing, Tenant shall not store any materials in the Rooftop Area. Landlord and its agents may enter and inspect the Rooftop Area at any time upon reasonable prior notice to Tenant. Concurrently with Tenant's installation of any locks for the Rooftop Area, Tenant will deliver to Landlord a key for any such lock. Tenant will not interfere with the mechanical, electrical, heating, ventilation and air conditioning, or plumbing systems of the Building or the operation, reception, or transmission of any other satellite, microwave, or other broadcasting or receiving devices that are, or will be, located on the roof of, or in, the Building.

5. Indemnification and Insurance. Tenant agrees and acknowledges that it shall use the Rooftop Area at its sole risk, and Tenant absolves and fully releases Landlord and Landlord Parties, from (i) any and all cost, loss, damage, expense, liability, and cause of action, whether foreseeable or not, arising from any cause, that Tenant may suffer to its personal property located in the Rooftop Area, or (ii) that Tenant or Tenant's officers, agents, employees, or independent contractors Landlord or the Landlord Parties may suffer as a direct or indirect consequence of Tenant's use of the Rooftop Area, the Antenna or access areas to the Rooftop Area, or (iii) any other cost, loss, damage, expense, liability, or cause of action arising from or related to this Agreement, excluding that caused by the gross negligence or willful misconduct of Landlord or the Landlord Parties. In addition, Tenant agrees to indemnify, defend, protect, and hold Landlord and the Landlord Parties harmless from and against any loss, cost, damage, liability, expense, claim, action or cause of action of any third party (including, but not limited to, reasonable attorneys' fees and costs, and, if Landlord requires the removal of the Antenna at the end of the term of this Agreement, any leaks in the roof or roof membrane during the 5-year period following Tenant's removal of the Antenna and any other rooftop equipment), whether foreseeable or not, resulting as a direct or indirect consequence of Tenant's use of the Rooftop Area, the Antenna or access areas to the Rooftop Area, except when such cost, loss, damage, expense, or liability is due to the gross negligence or willful misconduct of Landlord. In addition, Tenant will procure and maintain, at Tenant's sole expense, insurance in connection with the Rooftop Area, the Antenna and the obligations assumed by Tenant under this Agreement, in the same amounts and with the same types of coverage as required to be procured by Tenant under the Lease.

6. Defaults. If Tenant fails to cure the breach of any of the covenants set forth in this Agreement within ten (10) business days following notice from Landlord, Landlord shall have the right to terminate this Agreement upon written notice to Tenant. In addition, at the option of Landlord, breach of any of the covenants under this Agreement by Tenant beyond the above-referenced notice and cure period will also constitute a default by Tenant under the Lease, and a default by Tenant under the Lease (beyond applicable notice and cure periods) will also constitute a default by Tenant under this Agreement (in which event Landlord may terminate this Agreement upon notice to Tenant).

7. Notices. Any notice required or permitted to be given under this Agreement by Tenant or Landlord will be given under the terms of Section 29.18 of the Lease.

8. Incorporation of Lease Provisions. All applicable provisions of the Lease apply to Tenant's payment of amounts pursuant to this Agreement, and the use of the Rooftop Area in the same manner as those provisions apply to the Premises and are incorporated into this Agreement by this reference as though fully set forth in this Agreement. In the event of any conflicts between the provisions of this Agreement and the Lease, in connection with the interpretation of this Agreement only, the provisions of this Agreement shall govern.

9. No Warranty. Landlord has made no warranty or representation that the Antenna is permitted by law and Tenant assumes all liability and risk in obtaining all permits and approvals necessary for the installation and use of the Antenna. Landlord does not warrant or guaranty that Tenant will receive unobstructed transmission or reception to or from the Antenna and Tenant assumes the liability for the transmission and reception to and from the Antenna.

10. Assignment. Notwithstanding any contrary provision set forth in this Agreement, this Agreement, and Tenant's rights contained herein, may not be transferred or assigned to any other person or entity, and no person or entity other than Tenant and its employees shall be entitled to use the Antenna or the Rooftop Area; provided however, the rights hereunder may be transferred or assigned to a Permitted Transferee under Article 14 of the Lease in conjunction with an assignment or sublease of all of the Premises for all or substantially all of the remainder of the term of the Lease.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

"Landlord":

[insert Landlord signature block]

"Tenant":

_____,
a _____

By: _____

Name: _____

Title: _____

EXHIBIT E

-4-

Artiva Biotherapeutics, Inc.

SCHEDULE 1 TO ROOFTOP AREA LICENSE AGREEMENT

ANTENNA DESCRIPTION

[TO BE ATTACHED]

EXHIBIT E – Schedule 1

-1-

Artiva Biotherapeutics, Inc.

EXHIBIT “A” TO ROOFTOP AREA LICENSE AGREEMENT

THE ROOFTOP AREA

TO BE ATTACHED

EXHIBIT F

FORM OF LETTER OF CREDIT

Date: _____, 20__

IRREVOCABLE STANDBY LETTER OF CREDIT NUMBER: _____

Beneficiary/Landlord

Applicant/Tenant

Issuing Bank

Attention: _____

Attention: _____

Attention: _____

Facsimile No.: _____

Amount: TWO HUNDRED THIRTY-FIVE THOUSAND THREE HUNDRED FOUR UNITED STATES DOLLARS (\$235,304)

Expiration Date: _____, at our counters.

We hereby establish in favor of HSPF LA JOLLA COMMONS I INVESTORS LLC, a Delaware limited liability company ("**Beneficiary**"), our Irrevocable Letter of Credit No. _____ in the amount of TWO HUNDRED THIRTY-FIVE THOUSAND THREE HUNDRED FOUR UNITED STATES DOLLARS (\$235,304) for the account of ARTIVA BIOTHERAPEUTICS, INC., a Delaware corporation, or its affiliates, successors, assigns or subtenants ("**Tenant**"). Funds, up to the maximum aggregate amount available under this Letter of Credit, are payable by _____ ("**Bank**") within one (1) business day after Bank's receipt of one or more draw statements purportedly signed by Beneficiary's authorized officer or representative or, if this Letter of Credit is transferred, by an authorized officer or representative of any transferee beneficiary. Partial draws are expressly permitted hereunder.

Each draw statement should be addressed to Bank, reference this Letter of Credit by number, specify the amount of the draw request, set forth wire transfer instructions and state in substance (with the amount of the draw request and wire transfer instructions completed) the following: the Beneficiary is entitled to make a draw on Letter of Credit No. _____ in the amount of \$ _____ under the provisions of the Lease dated as of _____, 20__ between HSPF LA JOLLA COMMONS I INVESTORS LLC, a Delaware limited liability company and Tenant with respect to premises in the building located at 4747 Executive Drive in San Diego, California (the "**Lease**") and that (1) a default by Tenant has occurred under the Lease, or in lieu of item (1) above, (2) a default would exist and be continuing under the Lease but Landlord is barred by applicable law from delivering a notice of default to Tenant with respect thereto, or in lieu of item (1) or (2) above, (3) Tenant has failed to renew or replace this Letter of Credit at least thirty (30) days prior to any expiration date hereof, or in lieu of items (1), (2) or (3) above, (4) Tenant has failed to replace this Letter of Credit within thirty (30) days after Landlord's delivery to Tenant of a Downgrade Notice (as defined in the Lease), and Beneficiary hereby makes demand upon Bank for payment of US \$ _____ per this Letter of Credit and the sum being drawn does not exceed the amount available on the date hereof to be drawn under this Letter of Credit. Funds in respect of this draw request should be wire transferred to _____ bank, routing no. _____, account no. _____ for credit to the account of _____.

This Letter of Credit shall expire on _____ but such expiration date shall be automatically extended without notice or amendment for periods of one (1) year on each successive expiration date, but in no event later than the LC Expiration Date, as defined in Lease Section _____ (estimated to be _____, 20__), unless at least thirty (30) days before any expiration date, we notify you by registered mail or overnight courier service at the above address, that this Letter of Credit is not extended beyond the current expiration date.

Draw requests need not be presented as originals and may be submitted in person, by courier, by mail or by facsimile to Bank's address or facsimile number stated above not later than the LC Expiration Date, as defined in Lease Section _____ (estimated to be _____, 20____). Draw requests drawn hereunder must be marked: "Drawn under _____, Standby Letter of Credit Number _____ issued _____."

This Letter of Credit is transferable in its entirety without any limit on the number of such transfers upon Bank's receipt of a transfer request in the form attached as Schedule 1 signed by the then current Beneficiary. The charge for each transfer is limited to \$100 and shall be paid by the Beneficiary. This Letter of Credit is transferable provided that such transfer would not violate any governmental rule, order or regulation applicable to Bank.

Except as expressly provided herein to the contrary, this Letter of Credit is subject to the International Standby Practices 1998 (ICC Publication No. 590). Bank hereby waives and disclaims rights of subrogation in respect of any draw made by Beneficiary, whether arising under the Uniform Commercial Code or otherwise.

If you require any assistance or have any questions regarding this transaction, please call _____ .

Authorized Officer

Authorized Officer

EXHIBIT F

-2-

Artiva Biotherapeutics, Inc.

SCHEDULE 1

**REQUEST FOR ENTIRE ABSOLUTE AND IRREVOCABLE TRANSFER OF LETTER OF CREDIT
WITHOUT SUBSTITUTION OF INVOICES**

_____, 20__
Name _____

Address Letter of Credit No. _____

Issued By _____

To: _____

We request you to transfer all of our rights as beneficiary under the Letter of Credit referenced above to the new beneficiary named below:

Name of New Beneficiary

Address

By this transfer, all our rights as the original beneficiary, including all rights to make drawings under the Letter of Credit, go to the new beneficiary. The new beneficiary shall have sole rights as beneficiary, whether existing now or in the future, including sole rights to agree to any amendments, including increases or extensions or other changes. All amendments will be sent directly to the new beneficiary without the necessity of consent by or notice to us.

For your transfer fee:

The signature and title at the right conform with those shown in our files as authorized to sign for the beneficiary. Policies governing signature authorization as required for withdrawals from customer accounts shall also be applied to the authorization of signatures on this form.

Name of Bank

Authorized signature and title

Enclosed is our check for \$ _____

or

You may debit my/our account No. _____

We also agree to pay you on demand any expenses which may be incurred by you in connection with this transfer.

Name of Beneficiary

Name of authorized signer and title

Authorized signature

EXHIBIT F

-3-

Artiva Biotherapeutics, Inc.

OFFICE LEASE

HSPF LA JOLLA COMMONS I INVESTORS LLC,

a Delaware limited liability company,

as Landlord,

and

ARTIVA BIOTHERAPEUTICS, INC.

a Delaware corporation

as Tenant.

Artiva Biotherapeutics, Inc.

ARTICLE 1 PREMISES, BUILDING, PROJECT, AND COMMON AREAS	3
ARTICLE 2 LEASE TERM	4
ARTICLE 3 BASE RENT	6
ARTICLE 4 ADDITIONAL RENT	6
ARTICLE 5 USE OF PREMISES	11
ARTICLE 6 SERVICES AND UTILITIES	12
ARTICLE 7 REPAIRS	14
ARTICLE 8 ADDITIONS AND ALTERATIONS	15
ARTICLE 9 COVENANT AGAINST LIENS	16
ARTICLE 10 INSURANCE	17
ARTICLE 11 DAMAGE AND DESTRUCTION	18
ARTICLE 12 NONWAIVER	19
ARTICLE 13 CONDEMNATION	20
ARTICLE 14 ASSIGNMENT AND SUBLETTING	20
ARTICLE 15 SURRENDER OF PREMISES; OWNERSHIP AND REMOVAL OF TRADE FIXTURES	25
ARTICLE 16 HOLDING OVER	25
ARTICLE 17 ESTOPPEL CERTIFICATES	26
ARTICLE 18 SUBORDINATION	26
ARTICLE 19 DEFAULTS; REMEDIES	27
ARTICLE 20 COVENANT OF QUIET ENJOYMENT	29
ARTICLE 21 SECURITY	29
ARTICLE 22 SUBSTITUTION OF OTHER PREMISES	31
ARTICLE 23 SIGNS	32
ARTICLE 24 COMPLIANCE WITH LAW	32
ARTICLE 25 LATE CHARGES	33
ARTICLE 26 LANDLORD'S RIGHT TO CURE DEFAULT; PAYMENTS BY TENANT	33
ARTICLE 27 ENTRY BY LANDLORD	33
ARTICLE 28 TENANT PARKING	34
ARTICLE 29 MISCELLANEOUS PROVISIONS	35

EXHIBITS

A	OUTLINE OF PREMISES
B	TENANT WORK LETTER
C	NOTICE OF LEASE TERM DATES
D	RULES AND REGULATIONS
E	FORM OF ROOFTOP AREA LICENSE AGREEMENT
F	FORM OF LETTER OF CREDIT

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.**

OPTION AND LICENSE AGREEMENT

THIS OPTION AND LICENSE AGREEMENT (the “**Agreement**”) is made and entered into as of September 4, 2019 (the “**Effective Date**”) by and between **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Artiva**”), having a place of business at 4747 Executive Drive, Suite 1150, San Diego, CA 92121, USA, and **GREEN CROSS LABCELL CORPORATION**, a Korean corporation (“**GCLC**”), with its principal place of business at 107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 446-850, 16924, Republic of South Korea. Artiva and GCLC are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties**”.

RECITALS

A. GCLC has developed or otherwise controls certain intellectual property related to the discovery, research and development of natural killer cell (“**NK Cell**”) therapies.

B. Artiva is a privately-held biotechnology company focused on developing and commercializing cell therapies for hematologic malignancies or solid tumors, including NK Cells.

C. The Parties desire to establish a collaborative relationship, pursuant to which, among other things:

(a) Artiva would acquire an exclusive license under certain core GCLC intellectual property related to GCLC’s NK Cell program to develop, manufacture and commercialize Licensed Products in the Field in the Territory (each as defined below);

(b) GCLC would conduct a research and development program with the goal of developing Selected Products (as defined below); and

(c) GCLC would grant to Artiva an exclusive option to obtain an exclusive license under Selected Product Technology (as defined below) to develop, manufacture and commercialize Selected Products in the Field in the Territory;

in each case, on the terms and subject to the conditions set forth herein.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises, covenants and conditions contained in this Agreement, the Parties agree as follows:

1. DEFINITIONS

Capitalized terms used in this Agreement (other than the headings of the Sections or Articles) have the following meanings set forth in this Article 1, or, if not listed in this Article 1, the meanings as designated in the text of this Agreement.

1.1 “Affiliate” means, with respect to a particular Party, a person, corporation, partnership, or other entity that controls, is controlled by or is under common control with such Party. For the purposes of the definition in this Section 1.1, the word “**control**” (including, with correlative meaning, the terms “**controlled by**” or “**under the common control with**”) means the actual power, either directly or indirectly through one (1) or more intermediaries, to direct or cause

the direction of the management and policies of such entity, whether by the ownership of at least fifty percent (50%) of the voting stock of such entity, or by contract or otherwise. For purposes of this Agreement, Artiva shall not be considered an Affiliate of GCLC, and GCLC and its Affiliates shall not be considered Affiliates of Artiva.

1.2 “Asia” means, collectively, the following countries and territories: China (including Hong Kong and Macau), Japan, Mongolia, North Korea, South Korea, Taiwan, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Vietnam, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.

1.3 “Biosimilar Product” means, with respect to a Licensed Product and on a country-by-country basis, a product that [***].

1.4 “BLA” means (a) a Biologics License Application filed with the FDA for marketing approval of a Licensed Product, or any successor applications or procedures, and all supplements and amendments that may be filed with respect to the foregoing, or (b) similar filing outside the United States with applicable Regulatory Authorities, including the EMA. BLA excludes any application for pricing and reimbursement approvals.

1.5 “Business Day” means a day that is not a Saturday, Sunday or a day on which banking institutions in California or South Korea are required by applicable Law to remain closed.

1.6 “CAR” means a chimeric antigen receptor that includes at least: (a) an extracellular domain that includes an antibody; (b) a transmembrane domain; and (c) one or more cytosolic signaling domains.

1.7 “CAR-NK Cell” means a NK Cell that expresses or is capable of expressing a transgene encoding a CAR.

1.8 “CMC Activities” means the activities necessary or useful for generating the Information related to the chemistry, manufacturing and controls of any Licensed Product required for the Regulatory Approval of Licensed Products, as specified by the FDA or other applicable Regulatory Authority.

1.9 “Combination Product” means any combination of a Licensed Product with one (1) or more other active ingredients, products or services that is not a Licensed Product, where such products are sold either as a fixed dose/unit or as separate doses/units in a single package for a single price.

1.10 “Commercially Reasonable Efforts” means, with respect to GCLC’s or Artiva’s obligations under this Agreement, the carrying out of such obligations or tasks with a level of efforts and resources [***]. Commercially Reasonable Efforts shall be determined on a market-by-market and indication-by-indication basis, and it is anticipated that the level of efforts required shall be different for different markets and indications and shall change over time, reflecting changes in the status of the Licensed Product and markets involved.

1.11 “Confidential Information” of a Party means any and all Information that is disclosed or made available by one Party or its representatives to the other Party or its representatives pursuant to this Agreement, whether in oral, written, graphic, or electronic form. All confidential information disclosed by a Party pursuant to the Mutual Non-Disclosure Agreement between the Parties dated May 13, 2019 (the “**Confidentiality Agreement**”) shall be deemed to be such Party’s Confidential Information.

1.12 “Controlled” means, with respect to any compound, material, Information or intellectual property right, that the Party has the legal authority or right (whether by ownership, license or otherwise but without taking into account any rights granted by one Party to the other Party pursuant to this Agreement) to grant to the other Party access, a license or a sublicense (as applicable) to such compound, material, Information or intellectual property right as provided for herein without violating the terms of any agreement or other arrangements with any Third Party existing at the time such Party would be first required hereunder to grant the other Party such access, license or sublicense.

1.13 “Dollars” or “\$” means the legal tender of the U.S.

1.14 “EMA” means the European Medicines Agency or any successor entity.

1.15 “EU” means the European Union, as its membership may be altered from time to time, and any successor thereto. Notwithstanding the foregoing, the EU shall include the United Kingdom and each country within the United Kingdom for purposes of this definition regardless of whether such country officially exits the EU or the United Kingdom during the Term.

1.16 “Executive Officers” means the Chief Executive Officer of Artiva and the Chief Executive Officer of GCLC, or such other person (of similar seniority within Artiva or GCLC) designated by Artiva or GCLC from time to time.

1.17 “FDA” means the United States Food and Drug Administration or any successor entity.

1.18 “Field” means any therapeutic, prophylactic or diagnostic uses in humans.

1.19 “First Commercial Sale” means, with respect to a Licensed Product in a particular country in the Territory, the first commercial sale of such Licensed Product in such country after all needed Regulatory Approvals have been obtained in such country. Sales prior to receipt of Regulatory Approval for such Licensed Product in such country, such as so-called “treatment IND sales,” “named patient sales,” and “compassionate use sales,” shall not be a First Commercial Sale.

1.20 “GAAP” means generally accepted accounting principles in the U.S. or internationally, as applicable, consistently applied and shall mean the international financial reporting standards if a Party uses the international financial reporting standards, as they exist from time to time.

1.21 “GCLC Affiliate” means the [***] or any Affiliate of GCLC (a) with which GCLC has an agreement related to NK Cells, Licensed Products or Information or Patents related to NK Cells or Licensed Products, or (b) which GCLC engages to perform any activities of GCLC contemplated by this Agreement.

1.22 “GCLC Core Know-How” means all Information Controlled by GCLC or any GCLC Affiliate as of the Effective Date or during the Term relating to methods and tools for culturing or engineering NK Cells, NK Cells produced by such methods (including NK Cells containing CARs and NK Cells with other receptor or marker modifications), NK Cell manufacturing and production methods or cryoformulation technologies. GCLC Core Know-How excludes any Joint Inventions.

1.23 “GCLC Core Patents” means any Patents in the Territory Controlled by GCLC or any GCLC Affiliate as of the Effective Date or during the Term relating to methods and tools for culturing or engineering NK Cells, NK Cells produced by such methods (including NK Cells containing CARs and NK Cells with other receptor or marker modifications), NK Cell manufacturing and production methods or cryoformulation technologies, including those Patents listed on Exhibit 1.23. Exhibit 1.23 may be updated from time-to-time during the Term upon the mutual written agreement of the Parties. GCLC Core Patents excludes any Joint Patents.

1.24 “GCLC Core Technology” means the GCLC Core Know-How and GCLC Core Patents.

1.25 “Governmental Authority” means any multi-national, federal, state, local, municipal, provincial or other government authority of any nature (including any governmental division, prefecture, subdivision, department, agency, bureau, branch, office, commission, council, court or other tribunal).

1.26 “IND” shall mean an investigational new drug application, clinical trial application, clinical trial exemption, or similar application or submission filed with or submitted to a Regulatory Authority in a jurisdiction that is necessary to commence human clinical trials in such jurisdiction, including any such application filed with the FDA pursuant to 21 C.F.R. Part 312.

1.27 “Indication” means a human disease, disorder or medical condition that is [***].

1.28 “Information” means all tangible and intangible techniques, technology, practices, trade secrets, inventions (whether patentable or not), processes, formulations, compounds, products, biological materials, cell lines (it being understood that any rights to use Information include the rights to use such cell lines), samples of assay components, media, designs, formulas, ideas, programs, software models, algorithms, developments, experimental works, protocols, methods, knowledge, know-how, skill, experience, data and results (including pharmacological, toxicological and chemical and clinical data and results), compilations of data, other works of analytical and quality control data, specifications, methods, results, descriptions, compositions of matter, regulatory submissions, minutes, correspondence strategy, medical uses, adverse reactions and manufacture and quality control methods.

1.29 “Knowledge” means, with respect to a Party, the good faith understanding of the facts and information in the possession of an officer of such Party, or any in-house legal counsel of, or in-house patent agents employed by, such Party or its Affiliates, without any duty to conduct any additional investigation with respect to such facts and information by reason of the execution of this Agreement. For purposes of this definition, an **“officer”** means any person in the position of vice president, senior vice president, president or chief executive officer of a Party.

1.30 “Laws” means all laws, statutes, rules, regulations, ordinances and other pronouncements having the effect of law of any federal, national, multinational, state, provincial, county, city or other political subdivision, domestic or foreign.

1.31 “Licensed Product” means any NK Cell pharmaceutical product, process, service or therapy, in current or future formulations and any delivery mode, which shall include non-genetically modified NK Cells and genetically-modified NK Cells such as CAR-NK Cells and gene-edited CAR-NK Cells, regardless of origin, and any Combination Product.

1.32 “Net Sales” means, with respect to a given period of time, the gross amount invoiced by Artiva and its Affiliates and Sublicensees (each, a **“Selling Party”**) to Third Party (other than any Selling Party) purchasers for the sale or distribution of Licensed Products in the Territory, less the following deductions and offsets that are actually incurred, allowed, accrued, paid or taken and are allocated with respect to such sale or distribution:

- (a) [***];
- (b) [***];
- (c) [***];
- (d) [***];
- (e) [***];
- (f) [***]; and
- (g) [***].

Such amounts shall be determined in accordance with GAAP.

With respect to (c) above, (i) no deductions will be made for commissions paid to individuals whether they be with independent sales agencies or regularly employed by Licensee and on its payroll, or for cost of collections, and (ii) if a Licensed Product is distributed at a discounted price that is substantially lower than the customary price charged by Licensee, or distributed for non-cash consideration (whether or not at a discount), Net Sales will be calculated based on the non-discounted amount of the Licensed Product charged to an independent Third Party during the same calendar quarter or, in the absence of such sales, on the fair market value of the Licensed Product.

Sales of Licensed Products by a Selling Party to another Selling Party for resale by such entity to a Third Party (other than a Selling Party) shall not be deemed a sale for purposes of this definition of "Net Sales," *provided* that the subsequent resale is included in the computation of Net Sales. Transfers or dispositions of Licensed Products as free promotional samples in commercially reasonable amounts, consistent with prevailing industry standards, and Licensed Products used in research, development or regulatory activities, compassionate use, indigent programs, investigator-initiated trials or on a named patient basis shall be disregarded in determining Net Sales.

If any discounts or other deductions or rebates are made in connection with sales of a Licensed Product that is bundled or sold together with other products of the Selling Parties, then the discount, deduction or rebate applied to the Licensed Product shall not exceed the discount, deduction or rebate applied to any of the other products of the Selling Parties in such arrangement based upon the respective list prices of the Licensed Product and such other products prior to applying the discount, unless Artiva provides evidence reasonably satisfactory to GCLC that such difference is commercially reasonable and does not unfairly prejudice the Licensed Product in favor of such other products.

For Licensed Products which are sold as Combination Products, the Net Sales for such Combination Products shall be adjusted by [***].

1.33 “Option Candidate” shall mean a Selected Product that meets the Option Candidate Criteria.

1.34 “Option Candidate Criteria” shall mean the criteria that a Selected Product is expected to meet in order to be suitable for nomination, as set forth in Exhibit 1.34, as may be amended by written agreement of the Parties.

1.35 “Option Exercise Period” shall mean, with respect to an Option Candidate, the time period commencing on the date of JSC determination of qualification of such Option Candidate and ending [***]days after the Delivery Date of the Option Candidate Data Package for such Option Candidate (as may be extended as provided in Section 5.6).

1.36 “Patent” means all: (a) letters patent (including inventor’s certificates), including any substitution, extension, registration, confirmation, validation, reissue, re-examination, supplementary protection certificates, confirmation patents, patent of additions, renewal or any like filing thereof; (b) pending applications for letters patent (including applications for inventor’s certificates), including any continuation, division or continuation-in-part thereof and any provisional applications; and (c) any United States and international counterparts to any of (a) and (b) above.

1.37 “Regulatory Approval” means any and all approvals (including supplements, amendments, pre- and post-approvals, pricing and reimbursement approvals), licenses, registrations or authorizations (or waivers) of any national, supra-national (e.g., the European Commission or the Council of the EU), regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity, that are necessary for the manufacture, distribution, use, import, transport, promotion, marketing, offer for sale or sale of a Licensed Product in a regulatory jurisdiction.

1.38 “Regulatory Authority” means the applicable national (e.g., the FDA and EMA), supra-national (e.g., the European Commission or the Council of the EU), regional, state or local regulatory agency, department, bureau, commission, council or other Governmental Authority that, in each case, regulates or governs the development of a Licensed Product or the granting of Regulatory Approval of a Licensed Product in a regulatory jurisdiction.

1.39 “Regulatory Exclusivity” means any exclusive marketing rights or data exclusivity rights granted by a Regulatory Authority (other than Patents) with respect to a Licensed Product sold in a given country, including orphan drug exclusivity, new chemical entity exclusivity, data exclusivity or pediatric exclusivity.

1.40 “Regulatory Materials” means applications, submissions, notifications, registrations, Regulatory Approvals or other filings made to or with, or other approvals granted by, a Regulatory Authority that are necessary or reasonably desirable in order to develop, manufacture, use, market, sell or otherwise commercialize a Licensed Product in a particular country or regulatory jurisdiction.

1.41 “SEC” means the U.S. Securities and Exchange Commission or any successor entity.

1.42 “Selected Product” means a Licensed Product that is discovered or developed by GCLC or any GCLC Affiliate, whether pursuant to any R&D Plan or from any source cell originating from GCLC’s or GCLC Affiliate’s technology (whether before or after the Effective Date), as may be engineered or modified for improved therapeutic performance, including (a) expression or display of Target-specific receptors, activation domains or cytokines or (b) modification of inhibitory receptors or Human Leukocyte Antigens. Each of the Licensed Products identified as AB-101, AB-201, AB-301 and AB-401, each as described in Exhibit 1.42, shall be a Selected Product.

1.43 “Selected Product Know-How” means all Information Controlled by GCLC or any GCLC Affiliate as of the Effective Date or during the Term that relate specifically to a Selected Product or its manufacture or use (and are not otherwise included in GCLC Core Technology). Selected Product Know-How excludes any Joint Inventions.

1.44 “Selected Product Patents” means any Patents in the Territory Controlled by GCLC or any GCLC Affiliate as of the Effective Date or during the Term that relate specifically to a Selected Product or its manufacture or use (and are not otherwise included in GCLC Core Technology). Exhibit 1.44 sets forth the Selected Product Patents existing on the Effective Date. Exhibit 1.44 may be updated from time-to-time during the Term upon the mutual written agreement of the Parties. Selected Product Patents excludes any Joint Patents.

1.45 “Selected Product Technology” means the Selected Product Know-How and Selected Product Patents.

1.46 “Sublicensee” means a Third Party to whom Artiva grants a sublicense under some or all of the rights granted to Artiva pursuant to the Core License or any Selected Product License, beyond the mere right to purchase Licensed Products from or to provide services on behalf of Artiva and its Affiliates. In no event shall GCLC or any of its Affiliates be deemed a Sublicensee.

1.47 “Target” means any specific molecular target identified by any nucleic acid, gene or protein in biological tissues, which is specifically designated for a particular Selected Product.

1.48 “Territory” means all countries in the world, excluding Asia, Australia and New Zealand.

1.49 “Third Party” means any person or entity other than: (a) Artiva; (b) GCLC; or (c) an Affiliate of either Party.

1.50 “[*]”** means [***]

1.51 “U.S.” or “United States” means the United States of America, including all possessions and territories thereof.

1.52 “Universal Selected Product” means a Selected Product that is not antigen-specific, such as AB-101 or AB-301.

1.53 “Valid Claim” means: (a) a claim in an issued Patent that has not: (i) expired or been canceled; (ii) been declared invalid by an unreversed and unappealable or unappealed decision of a court or other appropriate body of competent jurisdiction; (iii) been admitted to be invalid or unenforceable through reissue, disclaimer or otherwise; or (iv) been abandoned in accordance with or as permitted by the terms of this Agreement or by mutual written agreement of the Parties; or (b) a claim in an application for a Patent that has been pending for not more than [***] years and has not been canceled, withdrawn from consideration, finally determined to be unallowable by the applicable Governmental Authority or court for whatever reason (and from which no appeal is or can be taken), or abandoned.

1.54 Additional Definitions. Each of the following definitions is set forth in the section of the Agreement indicated below:

<u>Definition</u>	<u>Section</u>
Agreement	Preamble
Alliance Manager	3.3
Artiva	Preamble
Artiva Indemnitees	12.1(b)
Claims	12.1(a)
Confidentiality Agreement	1.11
Core IP Royalties	6.1(a)
Core IP Royalty Term	6.1(b)
Core License	2.1
Delivery Date	5.2(b)
Development Plan	7.2(a)
Effective Date	Preamble
Exercised Selected Product	5.3
Exercise Notice	5.3
Existing Third Party Agreements	5.4(d)
Expert	13.5(a)
GCLC	Preamble
GCLC Indemnitees	12.1(a)
ICC	13.3
Indemnified Party	12.1(c)
Indemnifying Party	12.1(c)
JDC	3.2(a)
Joint Inventions	8.1
Joint Patents	8.1
JSC	3.1(a)
Materials	4.5
NK Cell	Preamble
Option/Options	5.1
Option Candidate Data Package	5.2(a)
Option Exercise	5.3
Option Termination Event	5.7
Parties/Party	Preamble
R&D Plan	4.2(a)
R&D Program	4.1
R&D Program Results	4.4
Retained Selected Product	5.7
Retained Third Party Agreement	5.4(d)
Selected Product License	5.3
Selected Product License Agreement	5.3
Selling Party	1.32
Term	10.1
Territory Sublicense Third Party Agreement	5.4(d)
Territory Third Party Agreement	5.4(d)

2. LICENSES AND RELATED RIGHTS

2.1 License Grant. Subject to the terms and conditions of this Agreement, GCLC hereby grants Artiva during the Term an exclusive (even as to GCLC and its Affiliates), royalty-bearing license, with the right to sublicense through multiple tiers as provided in Section 2.2, under the GCLC Core Technology, and GCLC's interest in Joint Inventions and Joint Patents, to research, develop, make, have made, use, offer for sale, sell and import Licensed Products (including (i) Exercised Selected Products and (ii) Licensed Products other than Selected Products developed by Artiva, itself or with any of its Affiliates or Third Parties) in the Field and in the Territory (the "**Core License**").

2.2 Sublicensing; Subcontracting. Artiva shall have the right to grant sublicenses of rights granted under the Core License, or subcontract its activities with respect to any Licensed Product, to its Affiliates, contractors and any other Third Party, *provided* that: (a) Artiva shall remain responsible for the performance or failure to perform by any such Affiliate, Sublicensee and subcontractor under their respective sublicensed or subcontracted rights or obligations to the same extent as if such activity were performed (or was failed to be performed) by Artiva; and (b) each such sublicense and subcontract agreement shall be consistent with the terms and conditions of this Agreement. Artiva shall provide GCLC with a copy of any sublicense agreement entered into with a Sublicensee, and any amendment thereto, within [***] days of its execution (*provided* that Artiva may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement).

2.3 Reserved Rights. GCLC hereby expressly reserves (a) all rights to practice, and to grant licenses under, the GCLC Core Technology and GCLC's interest in Joint Inventions and Joint Patents outside the Territory, (b) the right to conduct research and development to be conducted by GCLC or any GCLC Affiliate as contemplated by this Agreement and any services or manufacturing agreements entered into between GCLC or any GCLC Affiliate and Artiva, and (c) the right to practice, and to grant licenses under, the GCLC Core Technology for Retained Selected Products in the Territory. In addition, the Core License is subject to the following rights granted to [***] under the [***] as in effect as of the Effective Date and only for so long as such rights continue under the terms of the [***]: (i) a non-exclusive license, without the right to sublicense, under specified GCLC intellectual property to perform [***] activities under the research plan agreed to by [***] and GCLC as it exists as of the Effective Date; (ii) the option to negotiate with GCLC to obtain a non-exclusive right and license to specified GCLC intellectual property to [***]; and (iii) the option to negotiate with GCLC during [***].

2.4 Negative Covenant. Artiva covenants that it will not and will not permit any of its Affiliates, Sublicensees or subcontractors to use or practice any GCLC Core Technology or GCLC's interest in Joint Inventions and Joint Patents outside the scope of the Core License and Selected Product License(s). GCLC covenants that it will not and will not permit any of its Affiliates, or grant the right to or assist or collaborate with any Third Party, to directly or indirectly during the Term research, develop, make, have made, use, offer for sale, sell and import any Licensed Product in the Field in the Territory, except as expressly authorized in this Agreement.

2.5 No Implied Licenses. Except as explicitly set forth in this Agreement, neither Party shall be deemed by estoppel or implication to have granted the other Party any license or other right to any intellectual property of such Party.

2.6 Disclosure of GCLC Core Know-How. Within [***] days after the Effective Date, GCLC shall disclose to Artiva the GCLC Core Know-How existing as of the Effective Date. In addition, GCLC shall disclose to Artiva any GCLC Core Know-How that comes into existence after the Effective Date and was not previously provided to Artiva promptly after the development thereof (and at least every [***] months). During the Term, GCLC shall make available to Artiva, on a reasonable consultation basis, such advice of its technical personnel as may be reasonably requested by Artiva in connection with such transfer of GCLC Core Know-How.

3. GOVERNANCE

3.1 Joint Research Steering Committee.

(a) Formation; Composition. Within ten (10) days after the Effective Date, the Parties shall establish a Joint Research Steering Committee (“JSC”) composed of five (5) representatives, consisting of three (3) representatives of GCLC and two (2) representatives of Artiva, each of whom shall have appropriate technical credentials, experience, knowledge, and authority within such Party’s organization. The JSC shall be chaired by one of the JSC representatives of GCLC, which GCLC may replace at any time upon written notice to Artiva. Each Party may replace its JSC representatives at any time upon written notice to the other Party.

(b) Responsibilities and Authority. The JSC's overall responsibility shall be to oversee the progress and results of the R&D Program, and to encourage and facilitate ongoing cooperation and communication between the parties regarding the R&D Program. In particular, the JSC shall:

- (i) periodically review and approve updates and amendments to the R&D Plan consistent with the objectives set forth in Section 4.1;
- (ii) monitor the progress of R&D Plan activities;
- (iii) discuss and attempt to address scientific or technical issues arising in the course of R&D Plan activities;
- (iv) periodically review the Option Candidate Criteria;
- (v) review and discuss R&D Program Results;
- (vi) consider potential new Selected Products;

(vii) review all Information supporting nomination by GCLC of a Selected Product as an Option Candidate and determine whether such Selected Product qualifies as an Option Candidate; and

- (viii) perform such other duties as are specifically delegated to the JSC in this Agreement.

(c) Meetings. The JSC shall meet as deemed necessary by the members of the JSC, but no less frequently than quarterly. The JSC may meet in person or by means of telecommunication (telephone, video, or web conferences). The Parties will alternate in determining the location of in-person JSC meetings. Each Party shall be responsible for all of its own expenses of participating in JSC meetings.

(d) Minutes. GCLC shall be responsible for preparing minutes of each JSC meeting. GCLC shall circulate a draft of the minutes of each meeting to all members of the JSC for comments within [***] days after such meeting. Such minutes shall provide a description, in reasonable detail, of the discussions at the meeting and shall document all decisions and determinations made by the JSC at such meeting. Without limiting the generality of the foregoing, any amendment or update to the R&D Plan that is reviewed or approved at a JSC meeting shall be attached to the minutes of such meeting. The Parties shall promptly discuss any comments on such minutes and finalize the minutes no later than the date of the next JSC meeting.

(e) Decision-Making. Decisions of the JSC shall be made by consensus, with GCLC's representatives on the JSC collectively having one (1) vote and Artiva's representatives on the JSC collectively having one (1) vote. No vote of the JSC may be taken unless at least one (1) of each Party's representatives is present for the vote. Each Party shall be responsible for ensuring that, at all times, its representatives on the JSC act reasonably and in good faith in carrying out their respective responsibilities hereunder.

(f) Dispute Resolution. If the JSC cannot reach consensus with regard to any matter within its authority within [***] Business Days after such matter has been brought to the JSC's attention, then such matter shall be referred to the Executive Officers, who shall promptly meet and attempt in good faith to resolve such issue within [***] Business Days from the date upon which such matter is referred to them. In the event that the Executive Officers are unable to resolve such issue within [***] Business Days of the issue being referred to them, then, subject to Section 3.1(g) below, GCLC's Executive Officer shall have the tie-breaking vote; *provided, however*, that, in each case, GCLC's Executive Officer shall give good faith consideration and make reasonable efforts to take Artiva's position into account in making his or her decision.

(g) Limitation on Authority. The JSC shall have only such rights, powers and authority as are expressly delegated to it under this Agreement, and the JSC shall not be a substitute for the rights of the Parties hereunder. Notwithstanding any other provision of this Agreement, the JSC shall not have any right, power or authority:

- (i) to determine any issue in a manner that would conflict with the express terms and conditions of this Agreement; or
- (ii) to modify or amend the terms and conditions of this Agreement.

3.2 Joint Development Steering Committee.

(a) Formation; Composition. Within ten (10) days after the Effective Date, the Parties shall establish a Joint Development Steering Committee ("JDC") composed of five (5) representatives, consisting of three (3) representatives of Artiva and two (2) representatives of GCLC, each of whom shall have appropriate technical credentials, experience, knowledge, and authority within such Party's organization. The JDC shall be chaired by a representative of Artiva, which Artiva may replace at any time upon written notice to GCLC. Each Party may replace its JDC representatives at any time upon written notice to the other Party.

(b) Responsibilities and Authority. The JDC's overall responsibility shall be to oversee the development of Exercised Selected Products, and to encourage and facilitate ongoing cooperation and communication between the Parties regarding such Exercised Selected Products. In particular, the JDC shall:

- (i) review the strategic direction for, and encourage and facilitate ongoing communication between the Parties with respect to, the development, commercialization, manufacturing and supply of Exercised Selected Products in the Field in and outside the Territory;
- (ii) discuss and determine the strategy for development of Exercised Selected Products in the Field in the Territory, discuss the strategy for development of Licensed Products in the Field outside the Territory, and periodically review activities conducted pursuant to the Development Plan;
- (iii) review and discuss each Development Plan and annual updates thereto;

and
(iv) review and coordinate the strategy for regulatory filings for Exercised Selected Product in the Field in and outside the Territory;

(v) perform such other duties as are specifically delegated to the JDC in this Agreement.

(c) Meetings. The JDC shall meet as deemed necessary by the members of the JDC, but no less frequently than quarterly. The JDC may meet in person or by means of telecommunication (telephone, video, or web conferences). The Parties will alternate in determining the location of in-person JDC meetings. Each Party shall be responsible for all of its own expenses of participating in JDC meetings.

(d) Minutes. Artiva shall be responsible for preparing definitive minutes of each JDC meeting. Artiva shall circulate a draft of the minutes of each meeting to all members of the JDC for comments within [***] days after such meeting. Such minutes shall provide a description, in reasonable detail, of the discussions at the meeting and shall document all decisions and determinations made by the JDC at such meeting. The parties shall promptly discuss any comments on such minutes and finalize the minutes no later than the date of the next JDC meeting.

(e) Decision-Making. Decisions of the JDC shall be made by consensus, with GCLC's representatives on the JDC collectively having one (1) vote and Artiva's representatives on the JDC collectively having one (1) vote. No vote of the JDC may be taken unless at least one (1) of each Party's representatives is present for the vote. Each Party shall be responsible for ensuring that, at all times, its representatives on the JDC act reasonably and in good faith in carrying out their respective responsibilities hereunder.

(f) Dispute Resolution. If the JDC cannot reach consensus with regard to any matter within its authority within [***] Business Days after such matter has been brought to the JDC's attention, then such matter shall be referred to the Executive Officers, who shall promptly meet and attempt in good faith to resolve such issue within [***] Business Days from the date upon which such matter is referred to them. In the event that the Executive Officers are unable to resolve such issue within [***] Business Days of the issue being referred to them, then, subject to Section 3.2(g) below, Artiva's Executive Officer shall have the tie-breaking vote.

(g) Limitation on Authority. The JDC shall have only such rights, powers and authority as are expressly delegated to it under this Agreement, and the JDC shall not be a substitute for the rights of the Parties hereunder. Notwithstanding any other provision of this Agreement to the contrary, the JDC shall not have any right, power or authority:

- (i) to determine any issue in a manner that would conflict with the express terms and conditions of this Agreement; or
- (ii) to modify or amend the terms and conditions of this Agreement.

3.3 Alliance Managers. Within thirty (30) days after the Effective Date, each Party shall appoint and notify the other Party of the identity of a representative having the appropriate authority and qualifications, including a general understanding of pharmaceutical development and commercialization issues, to act as its alliance manager under this Agreement (the “**Alliance Manager**”). The Alliance Managers shall be primarily responsible for facilitating the flow of information and otherwise promoting communication and coordination between the Parties. Each Party may replace its Alliance Manager at any time upon written notice to the other Party.

4. R&D PROGRAM

4.1 Objective. Subject to the terms and conditions of this Agreement, GCLC shall perform a program of discovery, research and preclinical development and manufacture of Selected Products to generate and identify Option Candidates (the “**R&D Program**”).

4.2 R&D Plan.

(a) The discovery, research and preclinical development and manufacturing activities (including process development) to be conducted by GCLC (and, as applicable, GCLC Affiliates) in furtherance of the R&D Program, including the resources and estimated timeline for performance of such activities, shall be set forth in a mutually agreed, written research and development plan (as may be updated or amended, the “**R&D Plan**”), the initial version of which will be agreed to by the Parties within [***] days of the Effective Date. The R&D Plan shall be subject to amendment from time to time by the JSC in accordance with Section 3.1.

(b) GCLC shall be solely responsible, at its own expense, for all activities under the R&D Plan; *provided* that Artiva shall bear all costs for completing IND-enabling activities (such as preclinical toxicology and then-current good manufacturing practices production) performed by GCLC on behalf of Artiva (excluding [***]).

4.3 Performance of R&D Program. GCLC shall, and shall cause any GCLC Affiliates involved in the R&D Program to, perform the R&D Program in accordance with the R&D Plan and the terms and conditions of this Agreement. In addition, GCLC shall, and shall cause such GCLC Affiliates to:

(a) perform all R&D Program activities in good scientific manner and in compliance with all applicable Laws;

(b) use Commercially Reasonable Efforts to perform R&D Program activities substantially in accordance with the timeline for such activities set forth in the R&D Plan;

(c) prepare and maintain, or cause to be prepared and maintained, complete and accurate written records, accounts, notes and reports in good scientific manner and in sufficient detail for patent and regulatory purposes, which shall fully and properly reflect all work done, results achieved, Information generated, and inventions made in whole or in part, by GCLC or such GCLC Affiliates; and

(d) upon the reasonable request of Artiva, make such records available to Artiva for inspection or copying.

4.4 Reports. GCLC shall regularly inform Artiva, through the JSC or directly, of the progress and results of R&D Program activities conducted by or on behalf of GCLC or GCLC Affiliates. Without limiting the generality of the foregoing, and unless otherwise agreed, GCLC shall provide Artiva written reports of the R&D Program activities performed by or on behalf of GCLC or GCLC Affiliates and all data, results and other Information generated by or on behalf of GCLC or GCLC Affiliates in the performance of R&D Program activities ("**R&D Program Results**") reasonably in advance of each regularly-scheduled meeting of the JSC.

4.5 Materials Transfer. In furtherance of R&D Program activities, each Party may provide to the other Party chemical compounds or biological materials Controlled by the supplying Party (collectively, the "**Materials**") for use by the other Party in conducting the R&D Program activities for which such other Party is responsible. Except as otherwise expressly provided under this Agreement, all such Materials delivered to the other Party will remain the sole property of the supplying Party, will be used only in accordance with the R&D Plan and the terms and conditions of this Agreement, will not be used or delivered to or for the benefit of any Third Party without the prior written consent of the supplying Party, and will be used in compliance with all applicable Laws. The Materials supplied under this Agreement must be used with prudence and appropriate caution in any experimental work because not all of their characteristics may be known. Except as expressly set forth in this Agreement, THE MATERIALS ARE PROVIDED "AS IS" AND WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY WARRANTY THAT THE USE OF THE MATERIALS WILL NOT INFRINGE OR VIOLATE ANY PATENT OR OTHER PROPRIETARY RIGHTS OF ANY THIRD PARTY.

4.6 Use of Affiliates. GCLC may perform any R&D Program activity through any GCLC Affiliate; *provided*, in each case, that: (i) such GCLC Affiliate is bound by written agreement to comply with all applicable terms and conditions of this Agreement to the same extent as GCLC; (ii) GCLC shall remain fully responsible for the performance of such obligations by such Affiliate and for the compliance of such Affiliate with the terms and conditions of this Agreement; and (iii) any failure of such GCLC Affiliate to comply with the terms and conditions of this Agreement shall be deemed a breach of this Agreement by GCLC.

4.7 Option Candidate Nomination. As part of the R&D Program, the Parties shall, through the JSC, review the status of Selected Products and assess Information with respect to Selected Products so that the JSC may determine whether any Selected Product nominated by GCLC as a potential Option Candidate meets the Option Candidate Criteria. When the JSC determines that a Selected Product qualifies as an Option Candidate, the provisions of Section 5 shall apply to such Option Candidate.

5. OPTION GRANT

5.1 Grant of Option. Subject to the terms and conditions of this Agreement, with respect to each Option Candidate, GCLC hereby grants to Artiva, during the applicable Option Exercise Period, a fully paid-up and exclusive option to obtain an exclusive (even as to GCLC), royalty-bearing license, with the right to sublicense through multiple tiers, under the Selected Product Technology with respect to such Option Candidate, to research, develop, make, have made, use, offer for sale, sell and import such Option Candidate in the Field in the Territory (each, an “**Option**”, and collectively, the “**Options**”).

5.2 Option Candidate Data Package.

(a) Delivery. With respect to each Option Candidate, at such time the JSC determines that a Selected Product qualifies as an Option Candidate, GCLC shall promptly present such Option Candidate to Artiva for its consideration and provide to Artiva all material Information generated by or on behalf of GCLC with respect to such Option Candidate (“**Option Candidate Data Package**”), which shall include all research and pre-clinical studies performed with respect to such Option Candidate. GCLC shall make qualified GCLC representatives reasonably available to Artiva (at a JSC meeting or otherwise) for discussion of such Option Candidate Data Package. The Option Candidate Data Package shall be subject to review by Artiva to determine whether or not such Option Candidate Data Package is complete with respect to the activities outlined and agreed upon in the R&D Plan and that the Option Candidate meets the Option Candidate Criteria. If Artiva in good faith determines that such Option Candidate Data Package is not complete, Artiva shall identify the Information not included in such Option Candidate Data Package that is necessary to make such Option Candidate Data Package complete, and GCLC shall promptly make available such Information to Artiva, which shall then be considered part of the Option Candidate Data Package. Artiva shall make its request, if any, for such additional Information within [***] days after the delivery of the applicable Option Candidate Data Package, and GCLC shall provide such additional Information to Artiva no later than [***] days after Artiva’s request.

(b) Accuracy of Option Candidate Data Package. As of the date of delivery of each Option Candidate Data Package or the date on which Artiva has received all Information requested pursuant to Section 5.2(a), whichever is later (the “**Delivery Date**”), GCLC represents and warrants that the Information included in such Option Candidate Data Package is true, complete and correct.

5.3 Exercise of Option. Artiva may, in its sole discretion, exercise the Option with respect to each Option Candidate (the “**Option Exercise**”) at any time during the applicable Option Exercise Period upon delivery of written notice of exercise of such Option to GCLC (the “**Exercise Notice**”). Upon exercise of an Option for an Option Candidate in accordance with this Section 5.3, such Option Candidate shall be deemed an “**Exercised Selected Product**.” GCLC hereby grants to Artiva an exclusive (even as to GCLC), royalty-bearing license, with the right to sublicense through multiple tiers, under the Selected Product Technology with respect to the Exercised Selected Product, to research, develop, make, have made, use, offer for sale, sell and import such Exercised Selected Product in the Field in the Territory (each, a “**Selected Product**”).

License”), which Selected Product license shall automatically be effective upon exercise of the Option for such Exercised Selected Product. The Parties shall negotiate and enter into a license agreement with respect to such Exercised Selected Product and Selected Product License in accordance with the procedures set forth in Section 5.4 (each, a “**Selected Product License Agreement**”); *provided* that Artiva shall not practice the Selected Product License with respect to such Exercised Selected Product until the Parties have reached agreement on the economic terms of such Selected Product License pursuant to Section 5.4(b).

5.4 Selected Product License Agreement.

(a) Terms Other than Economic Terms. The terms of each Selected Product License Agreement (other than the economic terms, which shall be determined in accordance with Section 5.4(b)) shall be as mutually agreed by the Parties in good faith within [***] days of the Effective Date (as may be modified or added to by written agreement of the Parties).

(b) Economic Terms. The economic terms of the Selected Product License Agreement for AB-101 shall be as set forth in Exhibit 5.4(b). Following the Delivery Date of the Option Candidate Data Package for an Option Candidate other than AB-101, the Parties shall negotiate in good faith to determine the amount of upfront payments (if applicable), development milestones payments, sales milestone payments and royalty payments to be reflected in the Selected Product License Agreement for such Option Candidate if Option Exercise occurs, where the specific amounts shall reflect [***]. If no agreement on such economic terms is reached by the time of the Option Exercise with respect to such Option Candidate, unless the Parties agree otherwise, then the Parties will submit the dispute for resolution pursuant to Section 13.5 and will enter into a Selected Product License Agreement containing terms determined pursuant to such dispute resolution (as may be modified or added to by written agreement of the Parties).

(c) Consideration of Rights in Additional Countries. On an Exercised Selected Product-by-Exercised Selected Product basis, Artiva shall have the right to request, and GCLC shall consider in good faith, inclusion of Australia, New Zealand and/or specific countries in Asia in the Territory for a given Exercised Selected Product. In addition, if it would benefit the contemplated development program for an Exercised Selected Product for development activities to be conducted by or on behalf of Artiva in specific countries in Asia, Australia and New Zealand, Artiva and GCLC will discuss in good faith the possibility of a co-development collaboration for such Exercised Selected Product. The Selected Product License Agreement for such Exercised Selected Product would reflect the terms of any agreement by the Parties with respect to such matter.

(d) Existing Third Party Agreements. As of the Effective Date, GCLC is a party to agreements with the following Third Parties that relate to NK Cells, Licensed Products or Information or Patents related to NK Cells or Licensed Products: [***] (the “**Existing Third Party Agreements**”). The GCLC Core Technology does not include any Information or Patents Controlled by GCLC by virtue of rights granted under any such Existing Third Party Agreement. The Parties intend that, at Artiva’s election, Artiva would have rights under each such Existing Third Party Agreements in the Territory by amending and restating such Existing Third Party Agreements so that they are each separated into two agreements: (A) one agreement for rights in the Territory (a “**Territory Third Party Agreement**”), which would be assigned by GCLC to Artiva; and (B) one agreement for rights outside the Territory, which would be retained by GCLC (a “**Retained Third Party Agreement**”). Artiva would be responsible for all obligations to the Third Party under the applicable Territory Third Party Agreement arising after assignment of the Territory Third Party Agreement to Artiva. GCLC would be responsible for all obligations to the Third Party under the Existing Third Party Agreements arising prior to any separation (including any liability whenever arising for any action or inaction by GCLC thereunder prior to such separation) and for all obligations under the applicable Retained Third Party Agreement. To the extent the foregoing approach is not possible with respect to an Existing Third Party Agreement, then rights under such Existing Third Party Agreement in the Territory will be granted by GCLC to Artiva under the Selected Product License, as applicable, and such Existing Third Party Agreement will be deemed a “**Territory Sublicense Third Party Agreement**” only if Artiva provides GCLC with written notice in which: (I) Artiva consents to adding Information and Patents under such Existing Third Party Agreement to the definition of Selected Product Technology and such Existing Third Party Agreement to the definition of Territory Sublicense Third Party Agreement; (ii) Artiva agrees to be responsible for all payments that would be owed under such agreement between GCLC and such Third Party (as disclosed to Artiva) due to GCLC’s granting a sublicense to Artiva or Artiva’s practice of such sublicense; and (iii) Artiva acknowledges in writing that its sublicense is subject to the applicable terms and conditions of such Existing Third Party Agreement.

(e) Other Third Party Licenses. Each Party shall promptly notify the other Party if it becomes aware of any intellectual property rights of any Third Party that relate specifically to any Exercised Selected Product or other Selected Product or its manufacture or use. To the extent possible, Artiva shall have the right to negotiate and obtain a license from such Third Party in the Territory, and GCLC shall have the right to negotiate and obtain a license from such Third Party outside the Territory. If GCLC Controls Patents or other intellectual property rights of any Third Party that relate specifically to an Exercised Selected Product or its manufacture or use in the Territory (other than pursuant to an Existing Third Party Agreement as provided in Section 5.4(d)), GCLC shall notify Artiva in writing of such intellectual property rights, including a description thereof and any payments that GCLC is obligated to pay in connection with the Territory or the grant, maintenance or exercise of the sublicense to Artiva in the Territory. Such agreement between GCLC and such Third Party shall be deemed a Territory Sublicense Third Party Agreement, and such intellectual property rights will be sublicensed to Artiva only if Artiva provides GCLC with written notice in which: (i) Artiva consents to adding such intellectual property rights to the definition of Selected Product Technology and such agreement between

GCLC and such Third Party to the definition of Territory Sublicense Third Party Agreement; (ii) Artiva agrees to be responsible for all payments that would be owed under such agreement between GCLC and such Third Party (as disclosed to Artiva) due to GCLC's granting a sublicense to Artiva or Artiva's practice of such sublicense; and (iii) Artiva acknowledges in writing that its sublicense is subject to the applicable terms and conditions of such agreement between GCLC and such Third Party.

5.5 Negative Covenant. With respect to any Selected Product, after the Effective Date and during the Term, unless such Selected Product is deemed a Retained Selected Product pursuant to Section 5.7, GCLC hereby covenants not to practice, and not to grant any of its Affiliates or any Third Party a license to practice or otherwise permit or cause any of its Affiliates or any Third Party to practice, any Selected Product Technology to research, develop, make, have made, use, offer for sale, sell and import such Selected Product in the Field in the Territory.

5.6 Co-Development Option. With respect to each Option Candidate, at any time prior to the expiration of the applicable Option Exercise Period, Artiva may, in its sole discretion, as an alternative to exercising the Option for such Option Candidate, elect to engage with GCLC in discussions to enter into a co-development arrangement for such Option Candidate, for which GCLC shall engage and negotiate with Artiva in good faith (in which case the Option Exercise Period may be extended while the Parties are continuing to negotiate such arrangement in good faith).

5.7 Effect of Non-Exercise of Option; Reversion of Rights. If upon the expiration of the applicable Option Exercise Period for an Option Candidate, Artiva has not given the Exercise Notice with respect to such Option Candidate, and the Parties are not engaged in negotiating a co-development agreement pursuant to Section 5.6 with respect thereto (the "**Option Termination Event**", and such Option Candidate, a "**Retained Selected Product**"), then effective upon such Option Termination Event:

(a) the Option with respect to such Option Candidate shall automatically terminate; and

(b) subject to the terms and conditions of this Agreement, GCLC shall have the exclusive right to continue development of such Retained Selected Product, by itself or together with a Third Party, at GCLC's sole and absolute discretion and, at GCLC's election, the exclusive right, with the right to sublicense, under the GCLC Core Technology to research, develop, make, have made, use, offer for sale, sell and import such Retained Selected Product in the Field in the Territory would revert to GCLC (but, for the avoidance of doubt, such reversion shall have no effect on the Core License as to all Licensed Products other than such Retained Selected Product).

6. COMPENSATION

6.1 Core License Royalty Payments.

(a) Core IP Royalty Rates. Artiva shall pay to GCLC a royalty equal to [***] on Net Sales of each Licensed Product, including each Exercised Selected Product, the manufacture, use or sale of which is claimed by or uses any GCLC Core Technology, on a country-by-country and Licensed Product-by-Licensed Product basis during the Core IP Royalty Term, subject to the applicable adjustments in accordance with Section 6.1(e) below (the “**Core IP Royalties**”).

(b) Core IP Royalty Term. Royalties payable under Section 6.1(a) shall be payable on a Licensed Product-by-Licensed Product and country-by-country basis in the Territory during the period commencing on the First Commercial Sale of such Licensed Product in such country in the Territory and continuing until the later of (i) expiration of the last-to-expire Valid Claim of the GCLC Core Patents in the country of sale claiming such Licensed Product or the manufacture or use of such Licensed Product; (ii) expiration of any Regulatory Exclusivity for such Licensed Product in such country; and (iii) the tenth (10th) anniversary of the First Commercial Sale of such Licensed Product in such country (the “**Core IP Royalty Term**”). Following expiration of the Core IP Royalty Term for any Licensed Product in a given country, no further Core IP Royalties shall be payable in respect of GCLC Core Technology for such Licensed Product in such country, and the Core License granted to Artiva under Section 2.1 with respect to such Licensed Product in such country shall automatically become fully paid-up, perpetual and royalty-free and shall survive any expiration or termination of this Agreement.

(c) Royalty Reports and Payments. Within [***] days following the end of each calendar quarter following the First Commercial Sale of a Licensed Product upon which Core IP Royalties are payable anywhere in the Territory, Artiva shall provide GCLC with a report containing the following information for the applicable calendar quarter, on a Licensed Product-by-Licensed Product and country-by-country basis: (i) Net Sales of such Licensed Product in such country; (ii) the basis for any adjustments to royalties due to GCLC on account of Net Sales of such Licensed Product in such country; (iii) a calculation of the royalty payment due to GCLC on account of Net Sales of such Licensed Product in such country; and (iv) the exchange rate used in calculating any of the foregoing.

(d) Existing Third Party Payment Obligations. GCLC shall be responsible for any payments to any Affiliates or Third Parties for Patents or Information licensed or acquired by GCLC prior to the Effective Date, which are included in the GCLC Core Technology.

(e) Royalty Adjustments. Core IP Royalties shall be subject to adjustment as a result of the events set forth below.

(i) No Valid Claim. During any part of the Core IP Royalty Term for a Licensed Product in which there is no Valid Claim of the GCLC Core Patents in the country of sale claiming such Licensed Product or the manufacture, use or sale of such Licensed Product in such country, the Core IP Royalties shall be reduced by [***].

(ii) Third Party Royalty Credit. If Artiva or any of its Affiliates or Sublicensees obtains a license or sublicense from any Third Party under any intellectual property that is necessary in order to manufacture, use, sell, offer for sale or import a Licensed Product in the Territory (including any license by a Third Party to Artiva or sublicense by GCLC to Artiva described in Section 5.4(e), but excluding any license or sublicense to Artiva under an Existing

Third Party Agreement as provided in Section 5.4(d)) (each a “**Third Party License**”), and GCLC agrees that such Third Party License is necessary to manufacture, use, sell, offer for sale or import such Licensed Product in the Territory, such agreement not to be unreasonably withheld, then Artiva may deduct [***] of any royalty (or comparable payment based on sales of such Licensed Product) payable by Artiva or its Affiliate or Sublicensee in any calendar quarter in consideration for such Third Party License from the Core IP Royalties that would otherwise be due in any calendar quarter for such Licensed Product. Any amount paid to such Third Party which is entitled to be deducted under this Section 6.1(e)(ii) but is not deducted as a result of the limitation set forth in Section 6.1(e)(iv) shall be carried over and applied against Core IP Royalties payable to GCLC in respect of such Licensed Product in such country in subsequent calendar quarters until the full deduction is taken. In no event may Artiva credit payments under a Third Party License to reduce the Core IP Royalties with respect to a Licensed Product under this Section 6.1(e)(ii) and also to reduce the royalties payable with respect to the same Licensed Product that is an Exercised Selected Product under a Selected Product License Agreement.

(iii) Biosimilar Reduction. If a Biosimilar Product to a Licensed Product is sold in any country in the Territory during the Core IP Royalty Term for such Licensed Product and country, the Core IP Royalties payable with respect to such Licensed Product in such country will be reduced by [***] for the remainder of such Core IP Royalty Term.

(iv) Limitation. The total deductions under Sections 6.1(e)(ii) and (iii) shall not reduce the Core IP Royalties payable to GCLC under Section 6.1 (as reduced under Section 6.1(e)(i), if applicable) with respect to a Licensed Product in a given country in any calendar quarter by more than [***]. In no event will the Core IP Royalties be reduced for any reason whatsoever other than as provided in this Section 6.1(e).

6.2 Payment Method; Currency. All payments due under this Agreement to GCLC shall be made by bank wire transfer in immediately available funds to an account designated by GCLC. All payments hereunder shall be made in Dollars. When conversion of payments from any currency other than Dollars is required, such conversion shall be at an exchange rate equal to the weighted average of the rates of exchange for the currency of the country from which such payments are payable as published by *The Wall Street Journal*, Western U.S. Edition, during the calendar quarter in which the applicable sales were made.

6.3 Records; Inspection. Artiva shall, and shall cause its Affiliates and Sublicensees to, keep complete, true and accurate books of account and records for the purpose of determining the payments to be made under this Agreement. Such books and records shall be kept for [***] years following the end of the calendar year to which they pertain. Such records shall be open for inspection during such period by independent accountants, solely for the purpose of verifying payment statements hereunder for a period covering not more than [***] months prior to the date of request; *provided* that no period shall be subject to inspection under this section more than once. Such inspections shall be made no more than once each calendar year, on reasonable notice during normal business hours. The independent accountants will execute a reasonable written confidentiality agreement with Artiva and will disclose to GCLC only such information as is reasonably necessary to provide GCLC with information regarding any actual or potential discrepancies between amounts reported and actually paid and amounts payable under this

Agreement. The auditor will send a copy of the report to Artiva at the same time it is sent to GCLC. The report sent to both Parties will include the methodology and calculations used to determine the results. Any unpaid amounts that are discovered shall be paid promptly by Artiva. Inspections conducted under this Section 6.3 shall be at the expense of GCLC, unless the inspection discloses an underpayment by Artiva of [***] or more of the amount due for any period covered by the inspection, whereupon all costs relating to the inspection for such period shall be paid promptly by Artiva. If the inspection discloses an overpayment by Artiva, then Artiva will deduct the amount of such overpayment from amounts otherwise owed to GCLC under this Agreement, unless no further payments are due hereunder, in which case the amount of such overpayment shall be refunded by GCLC to Artiva.

6.4 Income Tax Withholding. Except as otherwise provided herein, GCLC will pay any and all taxes levied on account of any payments made to it under this Agreement. GCLC shall be responsible for any transfer, documentary, sales use, stamp, registration, value added or other similar tax (“**Transfer Tax**”) that is imposed with respect to the payments or the related transfer of rights or other property pursuant to the terms of this Agreement. If any taxes are required to be withheld by Artiva from any payment made to GCLC under this Agreement (“**Withholding Taxes**”), Artiva shall (a) deduct such Withholding Taxes from the payment made to GCLC, (b) timely pay the Withholding Taxes to the proper taxing authority, and (c) send proof of payment to GCLC and certify its receipt by the taxing authority within [***] days following such payment and all such Withholding Taxes shall be treated for all purposes under this Agreement as having been paid to GCLC. To extent Artiva fails to withhold Withholding Taxes from, or apply and pay Transfer Taxes with respect to, any payment to GCLC and it is determined that Artiva should have withheld Withholding Taxes or applied and paid Transfer Taxes, GCLC agrees to indemnify and/or reimburse Artiva for any Withholding Taxes or Transfer Taxes, along with penalties and interest as applicable.

6.5 Tax Documentation. GCLC has provided a properly completed and duly executed IRS Form W-8BEN-E to Artiva. Prior to the receipt of any payment under this Agreement, GCLC (and any other recipient of payments by Artiva under this Agreement) shall, to the extent it is legally permitted to, provide to Artiva, at the time or times reasonably requested by Artiva or as required by applicable Law, such properly completed and duly executed IRS Forms W-8 or W-9 claiming the benefits of an applicable tax treaty in the case of IRS Form W-8BEN-E. Such tax forms will, if applicable and legally permissible, claim the benefits of an applicable tax treaty to permit payments made under this Agreement to be made without, or at a reduced rate of, withholding for taxes.

7. DEVELOPMENT

7.1 Responsibilities. As between the Parties, Artiva (itself and with its Affiliates and Sublicensees) shall have sole right and responsibility, and ultimate decision-making authority, at its sole cost and expense, for conducting or having conducted development activities (including preclinical toxicology studies), regulatory activities (including, without limitation, filing for and obtaining Regulatory Approval, as applicable), manufacturing activities and commercialization activities in the Field in the Territory with respect to any Exercised Selected Products and any other Licensed Product that Artiva elects to develop, in accordance with the terms and conditions

of this Agreement. Artiva shall conduct (and cause its Affiliates and Sublicensees to conduct) all such activities in compliance in all material respects with all applicable Laws. As between the Parties, Artiva (or its Affiliate or Sublicensee) shall hold legal title to all Regulatory Materials with respect to Exercised Selected Products and other Licensed Products developed within the Territory. Promptly following the Effective Date, GCLC shall take and cause to be taken such actions and execute such documents that are requested in writing by Artiva to the extent necessary to transfer to Artiva all Regulatory Materials (if any) within the GCLC Core Know-How and Selected Product Know-How for Exercised Selected Products.

7.2 Development Plans.

(a) Development Plan. Within [***] days after exercising an Option with respect to a particular Option Candidate, Artiva shall prepare and deliver to the JDC for review and discussion an outline of the development, regulatory and manufacturing activities to be conducted by Artiva with respect to the Exercised Selected Product (as amended, the “**Development Plan**”). GCLC acknowledges and agrees that Artiva shall have the right to amend the Development Plan at any time in its sole discretion.

7.3 Development Records and Reports. Artiva shall maintain complete and accurate customary records (in the form of technical notebooks or electronic files where appropriate) of all development activities conducted by it or its Affiliates or Sublicensees, as applicable, under this Agreement and all Information resulting from such work. Such records, including any electronic files where such Information may also be contained, shall fully and properly reflect all work done and results achieved in the performance of the development activities in sufficient detail and in good scientific manner appropriate for applicable patent and regulatory purposes. Upon the expiry of each consecutive [***] period during the Term until First Commercial Sale of a Licensed Product, Artiva shall provide GCLC (through the JDC) with an update of development activities conducted by Artiva or its Affiliates or Sublicensees, as applicable, with respect to Exercised Selected Products. Any information or report provided by Artiva to GCLC pursuant to this Section 7.3 shall be Artiva’s Confidential Information and subject to the provisions of Article 9.

7.4 Data Access. In furtherance of the research and development activities of the Parties, Artiva hereby grants to GCLC an option to obtain an exclusive, royalty-bearing license to use all necessary Information from Artiva’s pre-clinical and clinical development activities with Selected Products, conducted by or on behalf of Artiva, solely for purposes of filing for and obtaining Regulatory Approval for Licensed Products outside of the Territory. Upon GCLC’s exercise of such option by written notice to Artiva, the Parties will enter into good faith negotiations regarding appropriate royalties and/or milestones to be paid for such license.

7.5 Diligence. During the term of the Selected Product License Agreement for an Exercised Selected Product, Artiva (itself or through its Affiliates or Sublicensees, as applicable), shall use Commercially Reasonable Efforts to (a) develop such Exercised Selected Product, (b) seek Regulatory Approval for such Exercised Selected Product in at least one (1) Indication in the United States and the EU, and (c) if Regulatory Approval has been granted for such Exercised Selected Product in a country in the Territory, commercialize such Exercised Selected Product in at least one (1) Indication in such country. To the extent that Artiva uses Commercially Reasonable Efforts (itself or through its Affiliates or Sublicensees, as applicable) to [***].

7.6 Services. During the Term, Artiva shall have the right to engage GCLC or its appropriate Affiliate to provide mutually agreed research services and manufacturing services for Exercised Selected Products and other Licensed Products being developed by Artiva in the Field in the Territory, pursuant to one or more written service agreements separately entered into between Artiva and the applicable GCLC Affiliate on customary and commercially reasonable terms agreed by the Parties in good faith. Such agreement(s) would include mutually agreed work plans setting forth the research services or the manufacturing services for the applicable Licensed Product, including a budget and payment terms for such services. GCLC shall propose the transfer price for Licensed Products and how payment for different Licensed Products will be accomplished, including payment for critical raw materials provided by Third Parties, which the Parties shall negotiate in good faith to reflect in the service agreement(s). For the manufacture of Licensed Product clinical grade materials, the Parties, and any applicable GCLC Affiliate as appropriate, shall also enter into a mutually agreed Quality Agreement appropriate to the stage of development and in compliance with applicable Law.

8. INTELLECTUAL PROPERTY

8.1 Ownership. All Information, discoveries and inventions (patentable or not) generated, conceived or reduced to practice in the performance of the research, development, commercialization or other activities contemplated by this Agreement, including all intellectual property rights therein, shall be as follows: (a) Artiva shall own all Information, discoveries and inventions made solely by employees, agents or independent contractors of Artiva and all intellectual property rights therein, (b) GCLC shall own all Information, discoveries and inventions made solely by employees, agents or independent contractors of GCLC and all intellectual property rights therein, and (c) the Parties shall jointly own all Information, discoveries and inventions made jointly by employees, agents or independent contractors of each Party (“**Joint Inventions**”) and all intellectual property rights therein. All Patents claiming Joint Inventions shall be referred to herein as “**Joint Patents**”. Subject to the rights and licenses granted under this Agreement and any Selected Product License Agreement, each Party shall be entitled to practice, grant licenses to, assign and exploit the Joint Inventions and Joint Patents without the duty of accounting or seeking consent from the other Party.

8.2 Patent Prosecution.

(a) GCLC Core Patents. Artiva shall have the first right, but not the obligation, at Artiva’s expense, to control the preparation, filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of the GCLC Core Patents in the Territory. Artiva shall keep GCLC reasonably informed of progress with regard to the preparation, filing, prosecution and maintenance of GCLC Core Patents in the Territory, including the countries

in the Territory in which it intends to file, maintain or abandon a given GCLC Core Patent. Artiva will notify GCLC of all warning letters, conflict proceedings, reexaminations, reissuance, oppositions, revocation proceedings or any other material challenge relating to a given GCLC Core Patent in the Territory. Artiva will consult with, and consider in good faith the requests and suggestions of, GCLC with respect to strategies for filing and prosecuting such GCLC Core Patents in the Territory. In the event that Artiva desires to abandon or cease prosecution or maintenance of any GCLC Core Patent in the Territory, Artiva shall provide reasonable prior written notice to GCLC of such intention (which notice shall, in any event, be given no later than [***] days prior to the next deadline for any action that may be taken with respect to such GCLC Core Patent in the Territory with the applicable patent office), and upon GCLC's written election provided no later than [***] days after such notice from Artiva, Artiva shall continue prosecution or maintenance of such GCLC Core Patent at GCLC's direction and expense. If GCLC does not provide such election within [***] days after such notice from Artiva, Artiva may continue prosecution and maintenance of such GCLC Core Patent in the Territory or discontinue prosecution and maintenance of such GCLC Core Patent in the Territory. GCLC shall have the sole right, but not the obligation, at GCLC's expense, to control the preparation, filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of the GCLC Core Patents outside the Territory. GCLC shall keep Artiva reasonably informed of progress with regard to the preparation, filing, prosecution and maintenance of GCLC Core Patents outside the Territory to the extent such activities could affect the GCLC Core Patents in the Territory.

(b) Joint Patents. Joint Patents shall be governed by Section 8.2(a).

(c) Cooperation. Promptly following the Effective Date, (but no less than [***] days before any statutory bar date), GCLC will transfer to Artiva all Information concerning the GCLC Core Patents in the Territory. GCLC shall cooperate with Artiva and shall execute any power of attorney or similar document, in each case to the extent reasonably required to allow Artiva to assume the preparation, filing, prosecution and maintenance in the Territory of the GCLC Core Patents in Artiva's name. Artiva shall cooperate with GCLC, in each case to the extent reasonably required to allow GCLC to assume the preparation, filing, prosecution and maintenance, of any Patent abandoned by Artiva pursuant to Section 8.2(a).

8.3 Patent Enforcement.

(a) Notification. If either Party becomes aware of any existing or threatened infringement of the GCLC Core Patents or Joint Patents, or the filing of a BLA by a Third Party for a product that names a Licensed Product as a reference product (or similar filing in a country other than the U.S.), it shall promptly notify the other Party in writing to that effect, and the Parties will consult with each other regarding any actions to be taken with respect to such infringement.

(b) Right to Enforce. Artiva shall have the first right, but shall not be obligated, to bring and control an infringement action with respect to any GCLC Core Patent or Joint Patent in the Territory against any person or entity, at Artiva's sole cost and expense. If Artiva does not bring such an action with respect to a GCLC Core Patent or Joint Patent in the Territory (or settle or otherwise secure the abatement of such infringement) prior to the earlier of: (i) [***] days following Artiva's receipt or delivery of the notice under Section 8.3(a), or (ii) [***] days before the deadline, if any, set forth in the applicable Laws for the filing of such actions, GCLC shall have the right to bring and control any such action, at its own expense and by counsel of its own choice.

(c) Cooperation. Each Party shall cooperate fully with the enforcing Party in such enforcement, at such enforcing Party's request and expense, including joining such action as a party plaintiff if required by applicable Laws to pursue such action. The enforcing Party shall keep the other Party regularly informed of the status and progress of such enforcement efforts, shall reasonably consider the other Party's comments on any such efforts. The non-enforcing Party shall be entitled to separate representation in such matter by counsel of its own choice and at its own expense, but such Party shall at all times cooperate fully with the enforcing Party. Neither Party shall have the right to settle any patent infringement litigation under this Section 8.3 in a manner that diminishes the rights or interests of the other Party without the prior written consent of such other Party, such consent not to be unreasonably withheld or delayed.

(d) Expenses and Recoveries. The enforcing Party bringing a claim, suit or action under this Section 8.3 shall be solely responsible for any expenses incurred by such Party as a result of such claim, suit or action. If such Party recovers monetary damages in such claim, suit or action, except as otherwise agreed by the Parties in connection with a cost-sharing arrangement, such recovery shall be allocated first to the reimbursement of any expenses incurred by the Parties in such litigation, and any remaining amounts shall be shared as follows: [***].

(e) Enforcement Outside the Territory. GCLC shall have the sole right, but shall not be obligated, to bring and control an infringement action with respect to any GCLC Core Patent or Joint Patent outside the Territory against any person or entity, at GCLC's sole cost and expense. GCLC shall keep Artiva reasonably informed of the enforcement of GCLC Core Patents or Joint Patents outside the Territory to the extent such activities could affect the GCLC Core Patents or Joint Patents in the Territory.

8.4 Patent Oppositions and Other Proceedings.

(a) In the Territory. If a GCLC Core Patent or Joint Patent in the Territory becomes the subject of any proceeding commenced by a Third Party in connection with an opposition, action for declaratory judgment, nullity action, interference or other attack upon the validity, title or enforceability thereof, then Artiva shall have the first right, but not the obligation, to control such defense at its own expense using counsel of its own choice. If Artiva decides that it does not wish to defend against such action, it shall notify GCLC reasonably in advance of all applicable deadlines, and GCLC shall thereafter have the right, but not the obligation, to assume defense of such action at its own expense.

(b) The Party controlling any defense under Section 8.4(a) shall permit the non-controlling Party to participate in the proceedings to the extent permissible under applicable Laws and to be represented by its own counsel at the non-controlling Party's expense. Notwithstanding any of the foregoing, the Party controlling any enforcement action pursuant to Section 8.3 shall also have the sole right to control the response to any attack on the validity, title, or enforceability of a Patent that is asserted by the alleged infringer(s) as a counterclaim or affirmative defense in such action. Neither Party shall have the right to settle any proceeding under this Section 8.4 in a manner that diminishes the rights or interests of the other Party without the prior written consent of such other Party, such consent not to be unreasonably withheld or delayed.

(c) **Outside the Territory.** GCLC shall have the sole right, but shall not be obligated, to control any opposition, action for declaratory judgment, nullity action, interference or other attack upon the validity, title or enforceability of any GCLC Core Patent or Joint Patent outside the Territory, at GCLC's own expense using counsel of its own choice. GCLC shall keep Artiva reasonably informed of any such defense of GCLC Core Patents or Joint Patents outside the Territory to the extent such activities could affect the GCLC Core Patents or Joint Patents in the Territory.

8.5 Patent Marking. Artiva shall mark Licensed Product (or when the character of the product precludes marking, the package containing any such Licensed Product) marketed and sold by Artiva or its Affiliates or Sublicensees in accordance with all applicable Laws relating to patent marking.

8.6 Infringement of Third Party Rights. If any Licensed Product used or sold by Artiva or its Affiliates or Sublicensees becomes the subject of a Third Party's claim or assertion of infringement of a Patent, each Party shall promptly notify the other Party. Neither Party shall have the right to settle any patent infringement litigation under this Section 8.6 in a manner that diminishes the rights or interests of the other Party without the written consent of such other Party (which shall not be unreasonably withheld).

9. CONFIDENTIALITY

9.1 Confidentiality Obligations. The Parties agree that during the Term and for a period of [***] years thereafter, a Party receiving Confidential Information of the other Party shall: (a) use reasonable efforts to maintain in confidence such Confidential Information (but not less than those efforts as such Party uses to maintain in confidence its own proprietary industrial information of similar kind and value); (b) not disclose such Confidential Information to any Third Party without prior written consent of the other Party, except to the extent expressly authorized by this Agreement or otherwise agreed in writing by the Parties; and (c) not use such other Party's Confidential Information for any purpose except those permitted by this Agreement or other written agreement between the Parties or in connection with exercising such Party's or its Affiliates' rights or fulfilling their obligations under this Agreement or other written agreement between the Parties.

9.2 Exceptions. The obligations in Section 9.1 shall not apply with respect to any portion of the other Party's Confidential Information that the receiving Party can show by competent written proof:

- (a) was known to the receiving Party, other than under an obligation of confidentiality, at the time of disclosure by the other Party;
- (b) was generally available to the public or otherwise part of the public domain, at the time of disclosure by the other Party;
- (c) becomes generally available to the public or otherwise part of the public domain after the disclosure by the other Party, other than through any act or omission of the receiving Party in breach of this Agreement;
- (d) is subsequently disclosed to the receiving Party by a Third Party who has a legal right to make such disclosure and who did not obtain such information directly or indirectly from the other Party; or
- (e) is subsequently independently developed by employees, subcontractors or sublicensees of the receiving Party or its Affiliates without use of the other Party's Confidential Information.

9.3 Authorized Disclosure. A Party may disclose the Confidential Information of the other Party to the extent such disclosure is reasonably necessary in the following instances; *provided* that notice of any such disclosure shall be provided as soon as practicable to such other Party:

- (a) filing or prosecuting Patents in accordance with Section 8.2;
- (b) complying with the requirement of Regulatory Authorities with respect to obtaining and maintaining Regulatory Approval of Licensed Products as permitted by this Agreement or any other written agreement between the Parties;
- (c) prosecuting or defending litigation as contemplated by this Agreement, including actions or proceedings in accordance with Section 8.3 or 8.4;
- (d) disclosure to its or its Affiliates' employees, directors, officers, agents, consultants, professional advisors, subcontractors, licensees or sublicensees or *bona fide* potential subcontractors, licensees or sublicensees, on a need-to-know basis for the sole purpose of performing its or its Affiliates' obligations or exercising its or its Affiliates' rights under this Agreement; *provided* that in each case, the disclosees are bound by written or professional obligations of confidentiality and non-use consistent with those contained in this Agreement;
- (e) disclosure to any *bona fide* potential or actual investor, acquiror or merger partner or other potential or actual financial or commercial partner for the sole purpose of evaluating an actual or potential investment, acquisition or other business relationship; *provided* that in each case, the disclosees are bound by written or professional obligations of confidentiality and non-use consistent with those contained in this Agreement; or

(f) complying with applicable Laws, including regulations promulgated by applicable security exchanges, court orders or administrative subpoenas or orders.

Notwithstanding the foregoing, in the event a Party is required to make a disclosure of the other Party's Confidential Information pursuant to Section 9.3(c) or (f), such Party shall promptly notify the other Party of such required disclosure and shall use reasonable efforts to assist the other Party, at such other Party's expense, in obtaining a protective order preventing or limiting the required disclosure.

9.4 Publicity; Terms of Agreement.

(a) If either Party desires to make a public announcement concerning the material terms of this Agreement, such Party shall give reasonable prior advance notice of the proposed text of such announcement to the other Party for its prior review and approval (except as otherwise provided herein), such approval not to be unreasonably withheld, except that in the case of a press release or governmental filing required by applicable Law, the disclosing Party shall provide the other Party with such advance notice as it reasonably can and shall not be required to obtain approval therefor. A Party commenting on such a proposed press release shall provide its comments, if any, within [***] Business Days after receiving the press release for review. Neither Party shall be required to seek the permission of the other Party to repeat any information regarding the terms of this Agreement or any amendment thereto that has already been publicly disclosed by such Party, or by the other Party, in accordance with this Section 9.4, provided such information remains accurate as of such time.

(b) The Parties acknowledge that either or both Parties may be obligated to file under applicable Laws a copy of this Agreement with the SEC or other Governmental Authorities. Each Party shall be entitled to make such a required filing, *provided* that it requests confidential treatment of the commercial terms and sensitive technical terms hereof and thereof to the extent such confidential treatment is reasonably available to such Party and permitted by such Governmental Authority. In the event of any such filing, the filing Party will consult with the other Party on the provisions of this Agreement to be redacted in any filing made with the SEC or as otherwise required by applicable Laws; *provided* that the filing Party shall have the right to make any such filing as it reasonably determines necessary under applicable Laws.

9.5 Equitable Relief. Each Party acknowledges that its breach of this Article 9 would cause irreparable harm to the other Party, which cannot be reasonably or adequately compensated in damages in an action at law. By reasons thereof, each Party agrees that the other Party shall be entitled, in addition to any other remedies it may have under this Agreement or otherwise, to preliminary and permanent injunctive and other equitable relief to prevent or curtail any actual or threatened breach of the obligations relating to Confidential Information set forth in this Article 9 by the other Party.

9.6 Technical Publications. At least [***] days prior to publishing, publicly presenting, and/or submitting for written or oral publication a manuscript, abstract or the like that includes Information relating to any Licensed Product that has not been previously published, each Party shall provide to the other Party a draft copy thereof for its review (unless such Party is required by law to publish such Information sooner, in which case such Party shall provide such draft copy to the other Party as much in advance of such publication as possible). The publishing Party shall consider in good faith any comments provided by the other Party during such [***] day period. In addition, the publishing Party shall, at the other Party's reasonable request, remove therefrom any Confidential Information of such other Party. The contribution of each Party shall be noted in all publications or presentations by acknowledgment or co-authorship, whichever is appropriate.

9.7 Prior Confidentiality Agreement. As of the Effective Date, the terms of this Article 9 shall supersede any prior non-disclosure, secrecy or confidentiality agreement between the Parties (or their Affiliates) relating to the subject of this Agreement, including the Confidentiality Agreement. Any information disclosed pursuant to any such prior agreement shall be deemed Confidential Information for purposes of this Agreement.

10. TERM AND TERMINATION

10.1 Term. This Agreement shall become effective on the Effective Date and, unless earlier terminated pursuant to this Article 10, shall remain in effect until the expiration of the last Core IP Royalty Term in the Territory (the "**Term**").

10.2 Termination for Material Breach. Each Party shall have the right to terminate this Agreement in its entirety immediately upon written notice to the other Party if the other Party materially breaches its obligations under this Agreement and, after receiving written notice identifying such material breach in reasonable detail, fails to cure such material breach within sixty (60) days from the date of such notice (or within thirty (30) days from the date of such notice in the event such material breach is solely based on the breaching Party's failure to pay any amounts due hereunder); *provided, however*, in the case of a breach or violation that cannot be cured within such sixty (60) day period, the non-breaching Party may terminate this Agreement following such sixty (60) day period only if the breaching Party shall have failed to commence substantial remedial actions within such sixty (60) day period and to use reasonable efforts to pursue the same. Any right to terminate under this Section 10.2 shall be stayed and the cure period tolled in the event that, during any cure period, the breaching Party shall have initiated dispute resolution in accordance with Article 13 with respect to the alleged breach, which stay and tolling shall last so long as the breaching Party diligently and in good faith cooperates in the prompt resolution of such dispute resolution proceedings. Each Party shall be entitled to offset, against amounts payable to the other Party under this Agreement, any amounts of damages determined, in a final decision by the applicable court action or other legal proceeding, to be owed to such Party by the other Party based on the other Party's material breach of this Agreement.

10.3 Termination Upon Insolvency. Either Party may terminate this Agreement upon written notice to the other Party, if, at any time, the other Party (a) files in any court or agency pursuant to any statute or regulation of any state, country or jurisdiction, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of such other Party or of its assets, (b) is served with an involuntary petition against it, filed in any insolvency proceeding that is not dismissed within ninety (90) days after the filing thereof, or (c) makes an assignment of the assets associated with this Agreement for the benefit of its creditors.

10.4 Termination by Artiva. Artiva may terminate this Agreement in its entirety without cause upon ninety (90) days prior written notice to GCLC.

10.5 Effects of Expiration or Termination of this Agreement. Upon any expiration or termination of this Agreement, all rights and obligations of the Parties shall terminate entirely, except as provided in this Section 10.5 and Section 10.7 and the sections referenced therein and:

(a) **Termination of License to Artiva.** All rights and licenses granted to Artiva hereunder shall terminate, except for any and all licenses that survive expiration or termination in accordance with the last sentence of Section 6.1(b); *provided* that if this Agreement is terminated by GCLC pursuant to Section 10.2 or 10.3, any sublicense granted to a Sublicensee that is not in breach under the applicable sublicense (and whose actions or omissions did not result in a breach by Artiva giving rise to GCLC's right of termination) will continue as a direct license from GCLC so long as the Sublicensee makes all payments to GCLC required under Section 6.1.

(b) **Remaining Inventories.** Artiva or its Affiliates, to the extent that such parties continue to have stocks of usable Licensed Products that would be subject to payment of Core IP Royalties pursuant to Section 6.1, may continue to fulfill orders received for Licensed Products until [***] months following the date of termination. For Licensed Products sold by Artiva or its Affiliates after the effective date of a termination, Artiva shall continue to pay Core IP Royalties pursuant to Section 6.1, as applicable.

(c) **Additional Effects of Termination.** Upon any termination of this Agreement, except termination of this Agreement by Artiva under Section 10.2, effective as of such termination, Artiva shall promptly (A) assign and transfer (or cause to be assigned and transferred) to GCLC or its designee (and provide copies of) all Regulatory Materials and Regulatory Approvals held in the name of Artiva, or any Affiliate it controls (within the meaning of Section 1.1), relating to any Licensed Product, including related correspondence with Regulatory Authorities and (B) disclose to GCLC, and grant to GCLC a Right of Reference and Use (as that term is defined in 21 C.F.R. § 314.3(b) or any non-United States equivalent) with respect to, all pre-clinical and clinical data, including pharmacology and biology data, in Artiva's or its applicable controlled Affiliates' Control with respect to any Licensed Product.

10.6 Damages; Relief. Termination of this Agreement shall not preclude either Party from claiming any other damages, compensation or relief that it may be entitled to upon such termination.

10.7 Survival. Termination or expiration of this Agreement shall not affect any rights or obligations of the Parties under this Agreement that have accrued prior to the date of termination or expiration (including any rights or obligations with respect to payments due and owing prior to the date of termination or expiration). Notwithstanding anything to the contrary, the following provisions shall survive any expiration or termination of this Agreement: Articles 1, 13 and 14 and Sections 2.5, 6.1(b) (final sentence only), 6.3 (for the term stated therein), 8.1, 9.1 (for the term stated therein), 9.2, 9.3, 9.4, 9.5, 9.7, 10.5, 10.6, 10.7, 10.8, 11.5, 12.1, 12.2 and 12.3 (for [***] years).

10.8 Rights under Bankruptcy or Insolvency Laws. All rights and licenses granted under or pursuant to this Agreement by one Party to the other Party are, and will otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws, licenses of right to “intellectual property” as defined under Section 101 of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws. The Parties agree that a Party that is a licensee of such rights under this Agreement will retain and may fully exercise all of its rights and elections under the provisions of applicable bankruptcy or insolvency laws. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party to this Agreement under the provisions of applicable bankruptcy or insolvency laws, the other Party will be entitled to a complete duplicate of (or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property, and same, if not already in its possession, will be promptly delivered to it (a) upon any such commencement of a bankruptcy or insolvency proceeding upon its written request therefor, unless the bankrupt Party elects to continue to perform all of its obligations under this Agreement, or (b) if not delivered pursuant to clause (a) above, following the rejection of this Agreement by or on behalf of the bankrupt Party upon written request therefor by the other Party.

11. REPRESENTATIONS AND WARRANTIES AND COVENANTS

11.1 Mutual Representations and Warranties. Each Party hereby represents and warrants to the other Party as follows:

(a) Corporate Existence. As of the Effective Date, it is a company or corporation duly organized, validly existing, and in good standing under the Laws of the jurisdiction in which it is incorporated.

(b) Corporate Power, Authority and Binding Agreement. As of the Effective Date, (i) it has the corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder; (ii) it has taken all necessary corporate action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder; and (iii) this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, and binding obligation of such Party that is enforceable against it in accordance with its terms.

(c) No Conflicts. The execution and delivery of this Agreement, and the performance by such Party of its obligations under this Agreement, including the grant of rights and licenses to the other Party pursuant to this Agreement, does not and will not: (i) conflict with, nor result in any violation of or default under, any instrument, judgment, order, writ, decree, contract or provision to which such Party is bound; (ii) give rise to the suspension, revocation, impairment, forfeiture or non-renewal of any material permit, license, authorization or approval that applies to such Party, its business or operations or any of its assets or properties; or (iii) conflict with any rights granted by such Party to any Third Party or breach any obligation that such Party has to any Third Party.

11.2 GCLC Representations and Warranties. GCLC represents and warrants to Artiva as of the Effective Date that:

(a) GCLC is the sole and exclusive owner of the GCLC Core Patents and Selected Product Patents (other than the GCLC Core Patents exclusively licensed to GCLC by [***], a GCLC Affiliate), in each case free and clear of all liens, and GCLC has the right to grant the licenses, sublicenses and other rights with respect to the GCLC Core Patents and Selected Product Patents that it purports to grant hereunder. Exhibit 1.23 is a true and complete list of all Patents Controlled by GCLC or any GCLC Affiliate as of the Effective Date that relate to methods and tools for culturing or engineering NK Cells, NK Cells produced by such methods (including NK Cells containing CARs and NK Cells with other receptor or marker modifications), NK Cell manufacturing and production methods or cryoformulation technologies. Exhibit 1.44 is a true and complete list of all Patents Controlled by GCLC or any GCLC Affiliate as of the Effective Date that relate specifically to a Selected Product or its manufacture or use (other than any GCLC Core Patents). All official fees, maintenance fees and annuities for the GCLC Core Patents and Selected Product Patents have been paid through the Effective Date.

(b) All issued GCLC Core Patents and Selected Product Patents are in full force and effect and subsisting, and inventorship of each Patent is properly identified on such Patents. No Third Party has asserted in writing that any issued GCLC Core Patent or Selected Product Patent is invalid or unenforceable. None of the GCLC Core Patents or Selected Product Patents is currently involved in any interference, reissue, reexamination, or opposition proceeding, and no such proceeding is threatened to the Knowledge of GCLC. GCLC has taken reasonable security measures consistent with industry standard practices, including measures against unauthorized disclosure, to protect the secrecy and confidentiality of trade secrets within the GCLC Core Know-How and Selected Product Know-How. GCLC and GCLC Affiliates have complied with all duties of candor required by applicable Governmental Authorities in the prosecution by GCLC or any GCLC Affiliates of any rights in the GCLC Core Technology or Selected Product Technology.

(c) GCLC (i) has provided Artiva a true and complete copy of the Existing Third Party Agreements, including any amendments thereto, and the Existing Third Party Agreements are in full force and effect in accordance with its terms; and (ii) is in compliance in all material respects with its obligations under the Existing Third Party Agreements and, to GCLC's knowledge, (A) the other parties to the Existing Third Party Agreements have not breached the Existing Third Party Agreements in any material respect, and (B) there is no basis for termination of the Existing Third Party Agreements;

(d) To GCLC's Knowledge, there are no activities by Third Parties that would constitute infringement of the GCLC Core Patents or Selected Product Patents or misappropriation of the GCLC Core Know-How or Selected Product Know-How.

(e) Neither GCLC nor any GCLC Affiliate has received any written notice from any person, or have Knowledge of, any actual or threatened claim or assertion that the use or practice of the GCLC Core Technology or Selected Product Technology infringes or misappropriates the intellectual property rights of a Third Party.

(f) There are no actual, pending, or alleged or threatened in writing, adverse actions, suits, claims, interferences or formal governmental investigations by or against GCLC or any GCLC Affiliate in or before any court or Governmental Authority involving GCLC Core Technology or Selected Product Technology.

(g) GCLC and GCLC Affiliates and, to GCLC's Knowledge, any subcontractor to which GCLC or any GCLC Affiliate has subcontracted activities in connection with any Licensed Product have complied in all material respects with all applicable Laws, including all good clinical practices, good laboratory practices and good manufacturing practices, permits, governmental licenses, registrations, approvals, authorizations, orders, injunctions and decrees, in the research, development, manufacture and use of any Licensed Product, and neither GCLC nor any GCLC Affiliate nor, to GCLC's Knowledge, any such subcontractor has received any written notice from any Governmental Authority claiming that any such activities as conducted by them are not in such compliance.

(h) All of GCLC's and GCLC Affiliates' employees or subcontractors acting on its behalf who have performed research, development, manufacturing or regulatory activities with respect to any Licensed Product are and will be obligated under a binding written agreement to comply with obligations of confidentiality and non-use no less restrictive than those set forth in Article 9.

11.3 Covenants. Each Party covenants to the other Party as follows:

(a) **No Debarment.** Neither such Party nor any of its Affiliates is debarred or disqualified under the United States Federal Food, Drug and Cosmetic Act or comparable applicable Laws in the Territory and, in the course of development, manufacturing or other activities relating to any Selected Product, neither Party nor any of its Affiliates or subcontractors has used or shall use any employee, consultant or subcontractor who has been debarred or disqualified or, to such Party's or its Affiliates' Knowledge, is the subject of debarment or disqualification proceedings by a Regulatory Authority. Each Party shall notify the other Party promptly upon becoming aware that any of its or its Affiliates' employees, consultants or subcontractors involved in any development, manufacturing or other activities relating to any Selected Product has been debarred or disqualified or is the subject of debarment or disqualification proceedings by any Regulatory Authority.

(b) **Compliance.** Both Parties and their respective Affiliates shall comply in all material respects with all applicable Laws in the development, manufacture and commercialization of any Selected Product, in each case, to the extent applicable, including the statutes, regulations and written directives of the FDA, the EMA and any other Regulatory Authorities, the Federal Food, Drug & Cosmetic Act, as amended, the Prescription Drug Marketing Act, the Federal Health Care Programs Anti-Kickback Law, 42 U.S.C. 1320a-7b(b), the statutes, regulations and written directives of Medicare, Medicaid and all other health care programs, as defined in 42 U.S.C. § 1320a-7b(f), and the Foreign Corrupt Practices Act of 1977, each as may be amended from time to time.

(c) Employees and Subcontractors. During the Term, all employees and subcontractors of a Party or its Affiliates performing research, development, commercialization or other activities contemplated hereunder on behalf of such Party or its Affiliates shall be obligated to undertake in writing obligations of ownership of Information, discoveries and inventions which are the same as those undertaken by the Parties pursuant to Section 8.1.

11.4 Additional GCLC Covenants. GCLC hereby covenants to Artiva that during the Term, GCLC shall not amend, modify or terminate any of the Existing Third Party Agreements in a manner that could affect Artiva, except with Artiva's prior written consent.

11.5 Disclaimer. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR NON-MISAPPROPRIATION OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS, ARE MADE OR GIVEN BY OR ON BEHALF OF A PARTY, AND ALL REPRESENTATIONS AND WARRANTIES, WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE, ARE HEREBY EXPRESSLY EXCLUDED.

12. INDEMNIFICATION AND LIMITATION OF LIABILITY

12.1 Indemnification.

(a) Indemnification by Artiva. Artiva shall defend, indemnify, and hold GCLC and its Affiliates and their respective officers, directors, employees, and agents (the "**GCLC Indemnitees**") harmless from and against any and all damages or other amounts payable by such GCLC Indemnitees, including any reasonable attorneys' fees, taxes (including penalties and interest), and costs of litigation incurred by, such GCLC Indemnitees, to the extent resulting from claims, suits, proceedings, or causes of action brought by any Third Party ("**Claims**") against such GCLC Indemnitees that arise from or are based on: (i) the development, manufacture or commercialization of any Licensed Product in the Territory, or performance of the CMC Activities, by or on behalf of Artiva or its Affiliates or Sublicensees (excluding in all cases GCLC or its Affiliates); (ii) the breach of any of Artiva's obligations under this Agreement, including Artiva's representations, warranties or covenants set forth herein; or (iii) the willful misconduct or negligent acts of Artiva or any of its Affiliates or any of its or their respective officers, directors, employees or agents. The foregoing indemnity obligation shall not apply to the extent that any of the Claims arises from, is based on, or results from any activity described in Section 12.1(b)(i), (ii) or (iii) for which GCLC is obligated to indemnify the Artiva Indemnitees under Section 12.1(b).

(b) Indemnification by GCLC. GCLC shall defend, indemnify, and hold Artiva and its Affiliates and their respective officers, directors, employees, and agents (the “**Artiva Indemnitees**”) harmless from and against any and all damages or other amounts payable by such GCLC Indemnitees, including any reasonable attorneys’ fees, taxes (including penalties and interest), and costs of litigation incurred by such Artiva Indemnitees, to the extent resulting from Claims against such Artiva Indemnitees that arise from or are based on: (i) the development, manufacture or commercialization of any Licensed Product, or performance of the CMC Activities, by or on behalf of GCLC or its Affiliates, licensees or sublicensees (other than Artiva and its Affiliates and Sublicensees); (ii) the breach of any of GCLC’s obligations under this Agreement, including of GCLC’s representations, warranties or covenants set forth herein; or (iii) the willful misconduct or negligent acts of GCLC or any of its Affiliates or any of its or their respective officers, directors, employees or agents. The foregoing indemnity obligation shall not apply to the extent that any of the Claims arises from, is based on, or results from any activity set forth in Section 12.1(a)(i), (ii) or (iii) for which Artiva is obligated to indemnify the GCLC Indemnitees under Section 12.1(a).

(c) Indemnification Procedures. The Party seeking indemnification (individually, the “**Indemnified Party**”), shall promptly notify the other Party (the “**Indemnifying Party**”) in writing of the Claim. Such Claim for indemnity shall indicate the nature of the Claim and the basis therefor. Promptly after a Claim is made for which the Indemnified Party seeks indemnity, the Indemnified Party shall permit the Indemnifying Party, at its option and expense, to assume the complete defense of such Claim, *provided* that (i) the Indemnified Party will have the right to participate in the defense of any such Claim at its own cost and expense, (ii) the Indemnifying Party will conduct the defense of any such Claim with due regard for the business interests and potential related liabilities of the Indemnified Party, and (iii) the Indemnifying Party will not agree to any settlement that would admit liability on the part of the Indemnified Party or involve relief other than payment of money, without the approval of the Indemnified Party, not to be unreasonably withheld; and *provided, further*, that if it is reasonably likely that the Parties may have conflicting interests or if it is otherwise not advisable under applicable legal and ethical requirements for the Indemnifying Party’s defense counsel to represent both Parties, separate independent counsel shall be retained for each Party at its own expense. The Indemnifying Party will not, in defense of any such Claim, except with the consent of the Indemnified Party, consent to the entry of any judgment or enter into any settlement which does not include, as an unconditional term thereof, the giving by the claimant or plaintiff to the Indemnified Party of a release from all liability in respect thereof. After notice to the Indemnified Party of the Indemnifying Party’s election to assume the defense of such Claim, the Indemnifying Party shall be liable to the Indemnified Party for such legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof at the request of the Indemnifying Party. As to those Claims with respect to which the Indemnifying Party does not elect to assume control of the defense, the Indemnified Party will afford the Indemnifying Party an opportunity to participate in such defense at the Indemnifying Party’s own cost and expense, and will not settle or otherwise dispose of any of the same without the consent of the Indemnifying Party.

12.2 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 12.2 IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER SECTION 12.1 OR DAMAGES AVAILABLE FOR A PARTY’S BREACH OF CONFIDENTIALITY OBLIGATIONS IN ARTICLE 9.

12.3 Insurance. Each Party shall procure and maintain insurance, including product liability insurance, with respect to its activities hereunder and which is consistent with normal business practices of prudent companies similarly situated at all times during which any Licensed Product is being clinically tested in human subjects or commercially distributed or sold. Each Party shall provide the other Party with evidence of such insurance upon request and shall provide the other Party with written notice at least [***] days prior to the cancellation, non-renewal or material changes in such insurance. It is understood that such insurance shall not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 12.

13. DISPUTE RESOLUTION

13.1 Disputes. The Parties recognize that disputes as to certain matters arising under or relating to this Agreement or either Party's rights or obligations hereunder may from time to time arise. It is the objective of the Parties to establish procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation and without resort to litigation. To accomplish this objective, the Parties agree to follow the procedures set forth in this Article 13 to resolve any controversy or claim arising out of, relating to or in connection with any provision of this Agreement, if and when a dispute arises under this Agreement.

13.2 Internal Resolution. With respect to all disputes arising between the Parties under this Agreement, including any alleged breach under this Agreement or any issue relating to the interpretation or application of this Agreement, if the Parties are unable to resolve such dispute within [***] days after such dispute is first notified by either Party in writing to the other, the Parties shall refer such dispute to the Executive Officers (or their designees) for attempted resolution by good faith negotiations within [***] days after such notice is received, including at least one (1) in person meeting of the Executive Officers within [***] days after such notice referring the dispute to the Executive Officers is received.

13.3 Binding Arbitration. If the Executive Officers of the Parties are not able to resolve such disputed matter within [***] days and either Party wishes to pursue the matter, each such dispute, controversy or claim, subject to Section 13.4, shall be finally resolved by binding arbitration administered by the International Chamber of Commerce ("ICC") pursuant to its Dispute Resolution Rules then in effect, and judgment on the arbitration award may be entered in any court having jurisdiction thereof. The Parties agree that:

(a) The arbitration shall be conducted by a panel of three (3) persons experienced in the pharmaceutical business. Within [***] days after initiation of arbitration, each Party shall select one (1) person to act as arbitrator and the two (2) Party-selected arbitrators shall select a third arbitrator within [***] days of their appointment. If the arbitrators selected by the Parties are unable or fail to agree upon the third arbitrator, the third arbitrator shall be appointed by the ICC. The place of arbitration shall be New York, New York, and all proceedings and communications shall be in English.

(b) Either Party may apply to the arbitrators for interim injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Either Party also may, without waiving any remedy under this Agreement, seek from any court having jurisdiction any injunctive or provisional relief necessary to protect the rights or property of that Party pending the arbitration award. The arbitrators shall have no authority to award punitive or any other type of damages not measured by a Party's compensatory damage. Each Party shall bear its own costs and expenses and attorneys' fees and an equal share of the arbitrators' fees and any administrative fees of arbitration, unless the arbitrators determine that a Party has incurred unreasonable expense due to vexatious or bad faith position taken by the other Party, in which event, the arbitrators may make an award of all or any portion of such expenses so incurred.

(c) Reasons for the arbitrators' decisions should be complete and explicit, including reasonable determinations of law and fact. The written reasons should also include the basis for any damages awarded and a statement of how the damages were calculated. Such a written decision shall be rendered by the arbitrators following a full comprehensive hearing, no later than [***] months following the selection of the arbitrators under Section 13.3(a).

(d) Except to the extent necessary to confirm an award or as may be required by applicable Laws, neither Party nor any arbitrator may disclose the existence, content, or results of an arbitration without the prior written consent of both Parties. In no event shall an arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the dispute, controversy or claim would be barred by the applicable statute of limitations.

13.4 Excluded Disputes. Notwithstanding Section 13.3, any dispute, controversy or claim relating to (a) the scope, validity, enforceability or infringement of any Patent, trademark or copyright or (b) any antitrust, anti-monopoly or competition law or regulation, whether or not statutory shall be submitted to a court of competent jurisdiction.

13.5 License Terms Determination.

(a) If the Parties fail to agree on all economic terms of a Selected Product License Agreement for an Option Candidate pursuant to Section 5.4(b) before Artiva delivers an Exercise Notice with respect thereto, then unless otherwise agreed in writing by the Parties (including any agreement by the Parties to continue negotiation of such terms) the unresolved terms shall be finally settled by an impartial and independent Third Party acting as expert, and not as an arbitrator (the "**Expert**").

(b) The Expert shall be an expert in [***]. Before accepting appointment, the Expert shall disclose to the Parties any circumstances that might give rise to a reasonable basis for questioning the Expert's impartiality or independence, or confirm in writing that no such circumstances exist.

(c) Within [***] Business Days following the selection of the Expert, each Party shall prepare and submit to the Expert and the other Party a written report setting forth its position with respect to the unresolved terms of the license. Each Party shall have [***] Business Days from receipt of the other Party's submission to submit a written response thereto. The Expert shall have the right to meet with the Parties, either alone or together.

(d) The Expert shall [***]. No later than [***] days after the designation of the Expert, the Expert shall make a determination, which will be made by [***]. The Expert shall provide the Parties with a written statement setting forth the basis of the determination in connection therewith. The Parties agree that such Expert's determination shall be final and determinative. The Party against whom the Expert rules shall bear all costs of the Expert.

14. MISCELLANEOUS

14.1 Entire Agreement; Amendments. This Agreement, including the Exhibits hereto, sets forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto with respect to the subject matter hereof, and supersedes all prior agreements and understandings between the Parties with respect to the subject matter hereof. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties other than as are set forth in this Agreement. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

14.2 Force Majeure. Each Party shall be excused from the performance of its obligations under this Agreement (other than any obligation make payments when due) to the extent that such performance is prevented by force majeure (as defined below) and the nonperforming Party promptly provides notice of the prevention to the other Party. Such excuse shall be continued so long as the condition constituting force majeure continues and the nonperforming Party takes reasonable efforts to remove the condition. For purposes of this Agreement, "force majeure" shall include conditions beyond the control of the Parties, including an act of God, war, civil commotion, terrorism, labor strike or lock-out, epidemic, failure or default of public utilities or common carriers, destruction of production facilities or materials by fire, earthquake, storm or like catastrophe. Notwithstanding the foregoing, the payment of amounts due and owing hereunder shall in no event be delayed by the payor because of a force majeure affecting the payor.

14.3 Notices. Any notices given under this Agreement shall be in writing, addressed to the Parties at the following addresses, and delivered by person, by facsimile (with receipt confirmation), or by FedEx or other reputable courier service. Any such notice shall be deemed to have been given: (a) as of the day of personal delivery; (b) one (1) day after the date sent by facsimile service; or (c) on the day of successful delivery to the other Party confirmed by the courier service. Unless otherwise specified in writing, the mailing addresses of the Parties shall be as described below.

If to Artiva:

Artiva Biotherapeutics, Inc.
4747 Executive Drive, Suite 1150
San Diego, CA 92121
Attention: Chief Executive Officer

With copies (which shall not constitute notice) to:

Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121-1909
Attention: L. Kay Chandler
FAX: +1 858 550 6420

If to GCLC:

Green Cross LabCell Corporation
107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si,
Gyeonggi-do, 446-850, 16924, Republic of South Korea.
Attention: Chief Executive Officer

With a copy (which shall not constitute notice) to:

Green Cross LabCell Corporation
107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si,
Gyeonggi-do, 446-850, 16924, Republic of South Korea.
Attention: Chief Financial Officer (KD Choi)
FAX: [***]

14.4 Assignment. Neither Party may assign or transfer this Agreement or any rights or obligations hereunder without the prior written consent of the other, except that a Party may make such an assignment or transfer without the other Party's consent (a) to its Affiliates, including in connection with any re-domiciling of such Party or its Affiliates, *provided* that the assigning Party shall remain liable and responsible to the non-assigning Party hereto for the performance and observance of all such duties and obligations by such Affiliate, or (b) to a Third Party successor to all or substantially all of the business of such Party to which this Agreement relates, whether in a merger, sale of stock, sale of assets or other transaction. Any permitted assignment shall be binding on the successors and permitted assigns of the assigning Party. Any assignment or attempted assignment by either Party in violation of the terms of this Section 14.4 shall be null, void and of no legal effect.

14.5 Performance by Affiliates. Each Party may discharge any obligations and exercise any right hereunder through any of its Affiliates. Each Party hereby guarantees the performance by its Affiliates of such Party's obligations under this Agreement, and shall cause its Affiliates to comply with the provisions of this Agreement in connection with such performance. Any breach by a Party's Affiliate of any of such Party's obligations under this Agreement shall be deemed a breach by such Party, and the other Party may proceed directly against such Party without any obligation to first proceed against such Party's Affiliate.

14.6 Further Actions. Each Party agrees to execute, acknowledge and deliver such further instruments, and to do all such other acts, as may be necessary or appropriate in order to carry out the purposes and intent of this Agreement.

14.7 Severability. If any of the provisions of this Agreement are held to be invalid or unenforceable by any court of competent jurisdiction from which no appeal can be or is taken, the provision shall be considered severed from this Agreement and shall not serve to invalidate any remaining provisions hereof. The Parties shall make a good faith effort to replace any invalid or unenforceable provision with a valid and enforceable one such that the objectives contemplated by the Parties when entering this Agreement may be realized.

14.8 No Waiver. Any delay in enforcing a Party's rights under this Agreement or any waiver as to a particular default or other matter shall not constitute a waiver of such Party's rights to the future enforcement of its rights under this Agreement, excepting only as to an express written and signed waiver as to a particular matter for a particular period of time.

14.9 Independent Contractors. Each Party shall act solely as an independent contractor, and nothing in this Agreement shall be construed to give either Party the power or authority to act for, bind, or commit the other Party in any way. Nothing herein shall be construed to create the relationship of partners, principal and agent, or joint-venture partners between the Parties. The Parties (and any successor, assignee, transferee, or Affiliate of a Party) shall not treat or report the relationship between the Parties arising under this Agreement as a partnership for United States tax purposes, without the prior written consent of the other Party unless required by a final "determination" as defined in Section 1313 of the United States Internal Revenue Code of 1986, as amended.

14.10 Governing Law. Resolution of all disputes, controversies or claims arising out of, relating to or in connection with this Agreement or the performance, enforcement, breach or termination of this Agreement and any remedies relating thereto, shall be governed by and construed under the substantive laws of the State of New York, U.S., without regard to conflicts of law rules.

14.11 Construction of this Agreement. When used in this Agreement, "including" means "including without limitation". The word "or" means "and/or" unless the context dictates otherwise because the subject of the conjunction are mutually exclusive. The words "herein," "hereof" and "hereunder" and other words of similar import refer to this Agreement as a whole and not to any particular Section or other subdivision. All references to days in this Agreement mean calendar days, unless otherwise specified. References to either Party include the successors

and permitted assigns of that Party. All references in this Agreement to the singular shall include the plural where applicable. The headings of this Agreement are for convenience of reference only and in no way define, describe, extend or limit the scope or intent of this Agreement or the intent of any provision contained in this Agreement. Unless otherwise specified, references in this Agreement to any Article shall include all Sections, subsections and paragraphs in such Article, references to any Section shall include all subsections and paragraphs in such Section, and references in this Agreement to any subsection shall include all paragraphs in such subsection. The Parties have each consulted counsel of their choice regarding this Agreement and have jointly prepared this Agreement, and, accordingly, no provisions of this Agreement shall be construed against either Party on the basis that the Party drafted this Agreement or any provision thereof. If the terms of this Agreement conflict with the terms of any Exhibit, then the terms of this Agreement shall govern. This Agreement has been prepared in the English language and English shall control its interpretation.

14.12 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which shall constitute together the same document. Counterparts may be signed and delivered by facsimile, or electronically in PDF format, each of which shall be binding when sent.

[Signature page follows.]

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals by their proper officers as of the Effective Date.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Thomas J. Farrell

Title: President & CEO

Date: September 4th, 2019

GREEN CROSS LABCELL CORPORATION

By: /s/ Dae-Woo Park

Title: CEO

Date: 04.09.2019

Exhibit 1.23
GCLC Core Patents

[**]

Exhibit 1.34
Option Candidate Criteria

[**]

Exhibit 1.42
AB-101, AB-201, AB-301, AB-401

<u>Product</u>	<u>Description</u>
AB-101 (CBNK)	● [***] ● [***]
AB-201 (CAR-CBNK)	● [***] ● [***] ● [***]
AB-301 (Enhanced CBNK)	● [***] ● [***]
AB-401 (iPSC-NK)	● [***] ● [***]

Exhibit 1.44
Selected Product Patents

[***]

Exhibit 5.4(b)

AB-101 Selected Product License Agreement Economic Terms

Payments for AB-101:	Licensee will pay Licensor milestone and royalty payments in consideration of the license with respect to AB-101 granted upon exercise of the Option to AB-101 as follows:
AB-101 Development Milestone Payments:	Licensee would pay Licensor the following one-time development milestones upon the first occurrence with respect to AB-101: 1. [***] 2. [***] 3. [***] 4. [***] 5. [***] 6. [***] 7. [***] 8. [***] 9. [***] 10. [***] 11. [***] 12. [***]
AB-101 Sales-Based Milestones:	Licensee would pay Licensor the following one-time sales-based milestones upon the first occurrence for AB-101: ● \$[***] upon achieving cumulative Net Sales of \$[***] for AB-101 in the Licensed Territory; ● \$[***] upon achieving cumulative Net Sales of \$[***] for AB-101 in the Licensed Territory; and ● \$[***] upon achieving cumulative Net Sales of \$[***] for AB-101 in the Licensed Territory.

AB-101 Royalties:

In addition to the Core IP Royalties, Licensee would pay Licensor royalties on Net Sales of AB-101 sold by Licensee and its affiliates and its sublicensees (including sales by any resellers, distributors, agents, etc. appointed by any of them) in the Licensed Territory, the manufacture, use or sale of which is claimed by or uses any Selected Product Technology (“**AB-101 Royalties**”) as follows (assuming a [***] royalty on Core IP):

- [***] of the portion of calendar year Net Sales of AB-101 that is less than or equal to \$[***];
- [***] of the portion of calendar year Net Sales of AB-101 that is greater than \$[***] and less than or equal to \$[***]; and
- [***] of the portion of calendar year Net Sales of AB-101 that is greater than \$[***] and less than or equal to \$[***]; and
- [***] of the portion of calendar year Net Sales of AB-101 that is greater than \$[***].

AB-101 Royalties would be subject to adjustments set forth in Section 6.1(e) of the Option and License Agreement as

applied to AB-101 Royalties, provided that [***]. AB-101 Royalties would be payable on a country-by-country in the Licensed Territory basis from the first commercial sale of AB-101 in a given country in the Licensed Territory through the longer of (a) the last to expire valid claim of the Selected Product Patents in such country claiming AB-101 or its manufacture or use, (b) the duration of any regulatory exclusivity for AB-101 in such country, or (c) 10 years after the first commercial sale of AB-101 in such country.

Amendment No. 1 to Option and License Agreement

This Amendment No. 1 (this “**Amendment**”), effective as of June 23, 2020, amends certain provisions of the Option and License Agreement dated September 4, 2019, between **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Artiva**”), having its principal place of business at 4747 Executive Drive, Suite 1150, San Diego, CA 92121 and **GREEN CROSS LABCELL CORPORATION**, a Korean corporation (“**GCLC**”), with its principal place of business at 107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 446-850, 16924, Republic of South Korea (hereinafter the “**Original Agreement**”).

WHEREAS, Artiva and GCLC find it in their respective interests to amend the provision of the Original Agreement as set forth below.

NOW THEREFORE, for consideration duly given, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree to the following:

1. Except as expressly amended hereby, the Original Agreement shall continue to remain in full force and effect in accordance with its terms.
2. **Section 10.5(c)** of the Original Agreement is hereby deleted in its entirety and replaced with the following:

“**Additional Effects of Termination.** Upon any termination of this Agreement, except termination of this Agreement by Artiva under Section 10.2, effective as of such termination, Artiva shall promptly (i) assign and transfer (or cause to be assigned and transferred) to GCLC or its designee (and provide copies of) all Regulatory Materials and Regulatory Approvals held in the name of Artiva, or any Affiliate it controls (within the meaning of Section 1.1), relating to any Licensed Product, including related correspondence with Regulatory Authorities and (ii) disclose to GCLC, and grant to GCLC a Right of Reference and Use (as that term is defined in 21 C.F.R § 314.3(b) or any non-United States equivalent) with respect to, all pre-clinical and clinical data, including pharmacology and biology data, in Artiva’s or its applicable controlled Affiliates’ Control with respect to any Licensed Product. For purposes of this Section 10.5(c) only, the term ‘Licensed Product’ shall exclude: (i) any Licensed Product solely developed by Artiva and/or its Affiliates in the Field and in the Territory; and (ii) any Licensed Product developed by a Third Party or Third Parties other than GCLC or its Affiliates (whether alone or in collaboration with Artiva, any of its Affiliates or any other Third Party), the manufacture, use or sale of which is not claimed by, and does not use, any GCLC Core Technology or GCLC’s interest in Joint Inventions and Joint Patents.”
3. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which shall constitute together the same document. The Parties agree that signatures transmitted by electronic means (e.g. facsimile or a scanned version of the executed agreement in PDF format attached to an e-mail) shall bind the Parties. This Amendment is otherwise governed by the terms and conditions of the Original Agreement, except as amended hereby.

IN WITNESS WHEREOF, each of the undersigned parties have had this Amendment executed by its duly authorized representatives.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Thomas J. Farrell

Printed Name: Thomas J. Farrell

Title: Chief Executive Officer

GREEN CROSS LABCELL CORPORATION

By: /s/ Dae-Woo Park

Printed Name: Dae-Woo Park

Title: Chief Executive officer

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.**

Omnibus Amendment

This Omnibus Amendment (this “**Amendment**”), effective as of February 3, 2022, is entered into by and between **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Artiva**”), having its principal place of business at 4747 Executive Drive, Suite 1150, San Diego, CA 92121 and **GC CELL CORPORATION (F/K/A GREEN CROSS LABCELL CORPORATION)**, a Korean corporation (“**GC Cell**” or “**GCLC**”), with its principal place of business at 107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 16924, Republic of South Korea.

WHEREAS, Artiva and GC Cell are party to (i) that certain Option and License Agreement dated September 4, 2019, as amended on June 23, 2020 (the “**Option and License Agreement**”), (ii) that certain Selected Product License Agreement (AB-101) dated November 21, 2019 (the “**AB-101 Agreement**”), (iii) that certain Selected Product License Agreement (AB-201) dated September 29, 2020 (the “**AB-201 Agreement**”), (iv) that certain Selected Product License Agreement (AB-202) dated March 24, 2021 (the “**AB-202 Agreement**”, and together with the AB-101 Agreement and AB-201 Agreement, the “**Selected Product License Agreements**”), and (v) Master Research Services Agreement dated August 3, 2020 (the “**Research Services Agreement**”, and together with the Option and License Agreement and the Selected Product License Agreements, the “**Agreements**”); and

WHEREAS, Artiva and GC Cell find it in their respective interests to amend certain provisions of the Agreements as set forth below.

NOW THEREFORE, for consideration duly given, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree to the following:

1. Except as expressly amended hereby, the Agreements shall continue to remain in full force and effect in accordance with its terms.
2. The Option and License Agreement is hereby amended as follows:
 - a. The following definitions are added to Section 1 of the Option and License Agreement:

“**Artiva Originated Product**” shall mean any Licensed Product that is expected to be covered by both GCLC Core Technology and Patents or Information Controlled by Artiva or its Sublicensees.

“**Artiva Originated Product Option Exercise Period**” shall mean, with respect to an Artiva Originated Product, the time period commencing on the Effective Date and ending upon [***].

“**Change of Control**” shall mean either: (a) a sale of all or substantially all of the assets of a Party to which this Agreement relates in one or a series of integrated transactions to a Third Party, or (b) the acquisition of a Party by a Third Party by means of any transaction or series of related transactions (including any stock acquisition, merger or consolidation), in which transaction or series of transactions the holders of outstanding

voting securities of such Party immediately prior to such transaction do not beneficially own, directly or indirectly, at least 50% of the combined outstanding voting power of the acquiring entity (or of such Party if it is the surviving entity in such transaction), or its direct or indirect parent entity, immediately after such transaction or series of related transactions.

b. The following is newly added as Section 2.3.1 of the Option and License Agreement:

“GCLC additionally expressly reserves the right to:

(a) use or practice any GCLC Core Technology either itself or through its third-party designee to be identified in writing to Artiva (“**GCLC Designee**”), to manufacture any Licensed Product in the Field in the Territory (i) for Artiva, or (ii) solely for sale and use outside of the Territory; and

(b) manufacture any Licensed Product in the Field in the Territory as long as GCLC and GCLC Designee does not use or practice any GCLC Core Technology, Selected Product Patents, or GCLC’s interest in Joint Inventions and Joint Patents.

For the avoidance of doubt, unless permitted pursuant to the above-described reservation, GCLC Core Technology, Selected Product Patents, Joint Inventions, and Joint Patents may not be used by GCLC or GCLC Designee other than with Artiva’s prior written consent granted (through a license grant back to GCLC specific to the applicable campaign) on a case-by-case basis, at Artiva’s sole discretion. Artiva and GCLC shall engage in good faith consultation in relation to such proposed use. Artiva shall have audit rights through an independent third party to confirm GCLC’s (and GCLC Designee’s) non-use of GCLC Core Technology in its CDMO business. If such audit reveals unpermitted use of GCLC Core Technology, Artiva shall be entitled to obtain timely injunctive relief as to such unpermitted activities, as well as such further relief and penalties as may be granted by a court of competent jurisdiction.”

c. The following is newly added as Section 3.4 of the Option and License Agreement:

“3.4 Joint Oversight Committee.

(a) **Formation; Governance.** The Parties shall establish a Joint Oversight Committee (“**JOC**”), which shall have the same composition and governance structure as the JDC, as set forth in Section 3.2(a), (c), (d), (e), (f) and (g), in each case as applied to the JOC, provided that JOC members from each Party shall include the Chief Executive Officer and other senior executives designated by each party.

(b) **Purpose.** The JOC’s purpose shall be to share information related to Artiva Originated Products that comprise elements of GCLC Core Technology, provided that Artiva shall not be obligated to share any information that is prohibited by a third party or that is material non-public information. In particular, Artiva shall

share through the JOC the identity of the target for any Artiva Originated Product upon Artiva actively engaging in preclinical activities for such product and shall provide reasonable updates thereafter with respect to the research and development, and commercialization plans for such product. Such information sharing related to Artiva Originated Products shall be provided on an annual basis upon a Change of Control of Artiva.”

d. The following is newly added as Section 5.8 of the Option and License Agreement:

“5.8 Option for Artiva Originated Products.

(a) Grant of Artiva Originated Product Option. Subject to the terms and conditions of this Agreement, with respect to each Artiva Originated Product on a product-by-product basis, GCLC hereby grants to Artiva, during the applicable Artiva Originated Product Option Exercise Period, a fully paid-up and exclusive option to extend the Core License to be a worldwide license (each, an **“Artiva Originated Product Option”**).

(b) Exercise of Artiva Originated Product Option. Artiva may, in its sole discretion, exercise the Artiva Originated Product Option with respect to each Artiva Originated Product (the **“Artiva Originated Product Option Exercise”**) at any time during the applicable Artiva Originated Product Option Exercise Period upon delivery of written notice of exercise of such Artiva Originated Product Option to GCLC (the **“Artiva Originated Product Exercise Notice”**). Upon exercise of an Artiva Originated Product Option for an Artiva Originated Product in accordance with this Section 5.8, such Artiva Originated Product shall be deemed an **“Exercised Artiva Originated Product.”** GCLC hereby grants to Artiva an exclusive (even as to GCLC), royalty-bearing license, worldwide solely with respect to such Exercised Artiva Originated Product, with the right to sublicense through multiple tiers, under the GCLC Core Technology and GCLC’s interest in Joint Inventions and Joint Patents, to research, develop, make, have made, use, offer for sale, sell and import such Exercised Artiva Originated Product in the Field (each, a **“Worldwide Artiva Originated Product License”**), which Worldwide Artiva Originated Product License shall automatically be effective upon exercise of the Artiva Originated Product Option for such Exercised Artiva Originated Product, and thereafter the Core IP Royalty *solely* with respect to such Exercised Artiva Originated Product shall be increased from [***] to [***] of worldwide Net Sales of such Exercised Artiva Originated Product for the Core IP Royalty Term, subject to the applicable adjustments in accordance with Section 6.1(e) below.

(c) Effect of Non-Exercise of Artiva Originated Product Option. If Artiva does not exercise the Artiva Originated Product Option for an Artiva Originated Product prior to end of the Artiva Originated Product Option Exercise Period, the Artiva Originated Product Option shall lapse with respect to such Artiva Originated Product and GCLC shall have a one-time right of first negotiation to obtain a royalty-

bearing, exclusive license outside the Territory to Artiva's pre-clinical and clinical data for such Artiva Originated Product and Artiva Controlled patents and know-how that relate specifically to such Artiva Originated Product (the "**GCLC AOP Ex-Territory License**"). Such right of negotiation shall be exercisable by written notice by GCLC to Artiva for the period beginning at the end of the Artiva Originated Product Option Exercise Period and shall end [***] days thereafter, and upon exercise, the Parties shall enter into good faith negotiations on the terms of such GCLC AOP Ex-Territory License for a period of at least [***] days, after which such right of first negotiation shall lapse with respect to such Artiva Originated Product."

e. The following is newly added as Section 5.9 of the Option and License Agreement:

"5.9 Option for Improvements to GCLC Core Technology. Artiva agrees to grant to GCLC a non-exclusive option (the "**GCLC Improvement Option**") to a royalty-bearing, non-exclusive license to any improvements to the licensed GCLC Core Technology ("**Improvements**") that are Controlled solely by Artiva, to develop, make, have made, use, offer for sale, sell and import NK cell products outside the Territory for the purpose of using such products and any products produced by such methods outside the Territory (the "**GCLC Improvement License**"). Such GCLC Improvement Option shall be exercisable by written notice by GCLC to Artiva identifying the applicable Improvement, and upon exercise, the Parties shall enter into good faith negotiations on the terms of such GCLC Improvement License for a period of at least [***] days, after which such option shall lapse with respect to such Improvement. The GCLC Improvement Option shall expire upon a Change of Control of Artiva. The Parties shall cooperate in good faith through the JOC to facilitate the sharing of information related to Improvements as necessary to enable GCLC to exercise its GCLC Improvement Option with respect thereto."

f. Section 6.1(a) of the Option and License Agreement is hereby amended and restated as follows:

"(a) Core IP Royalty Rates. (i) Artiva shall pay to GCLC a royalty equal to [***] on Net Sales of each Licensed Product, including each Exercised Selected Product (or [***] on Net Sales of each Exercised Artiva Originated Product where applicable), the manufacture, use or sale of which is claimed by or uses any GCLC Core Technology, on a country-by-country and Licensed Product-by-Licensed Product basis during the Core IP Royalty Term, subject to the applicable adjustments in accordance with Section 6.1(e) below (the "**Core IP Royalties**"), or (ii) where Joint Patents are the only Patents that claim the Licensed Product or the manufacture, use or sale thereof, Artiva shall pay to GCLC a royalty on the Net Sales of each Licensed Product, including each Exercised Selected Product, the manufacture, use or sale of which is claimed by or uses any Joint Patent, on a country-by-country and Licensed Product-by-Licensed Product basis during the Core IP Royalty Term, where the royalty rate shall be equal to 50% of the Core IP Royalty payable by Artiva for such Licensed Product for Net Sales in the Territory.

g. Section 6.1(b)(i) of the Option and License Agreement is hereby amended and restated as follows:

“(i) expiration of the last-to-expire Valid Claim of the GCLC Core Patents and Joint Patents in the country of sale claiming such Licensed Product or the manufacture or use of such Licensed Product”

h. The following is newly added as Section 6.1(f) of the Option and License Agreement:

“(f) **Joint Patent Royalty.** GCLC shall pay to Artiva a royalty on the GCLC Net Sales of each Licensed Product, including each Exercised Selected Product, the manufacture, use or sale of which is claimed by or uses any Joint Patent, on a country-by-country and Licensed Product-by-Licensed Product basis during the Core IP Royalty Term, where the royalty rate shall be equal to 50% of the Core IP Royalty payable by Artiva for such Licensed Product for Net Sales in the Territory. For purposes of the foregoing, “**GCLC Net Sales**” shall mean the gross amount invoiced by GCLC and its Affiliates and sublicensees to Third Party purchasers for the sale or distribution of Licensed Products, including each Exercised Selected Product, outside the Territory, less the same categories of deductions and offsets described in the definition of Net Sales, as applied in the same manner to Licensed Products outside the Territory, that are actually incurred, allowed, accrued, paid or taken and are allocated with respect to such sale or distribution. The foregoing royalty shall be payable on a Licensed Product-by-Licensed Product and country-by-country basis outside the Territory during the period commencing on the First Commercial Sale of such Licensed Product in such country outside the Territory and continuing until the end of the Core IP Royalty Term.”

i. The last sentence of Section 8.1 of the Option and License Agreement is hereby amended and restated as follows:

“Subject to the rights and licenses granted under this Agreement, including the obligations in Section 6.1, and any Selected Product License Agreement, each Party shall be entitled to practice, grant licenses to, assign and exploit the Joint Inventions and Joint Patents without the duty of accounting or seeking consent from the other Party.”

3. The License Agreements are hereby amended as follows:

a. Section 3.1(b)(i) of the AB-101 Agreement and Section 3.2(b)(i) of the AB-201 Agreement and the AB-202 Agreement are each hereby amended and restated as follows:

“(i) expiration of the last-to-expire Valid Claim of the Product Patents and Additional Joint Patents in the country of sale claiming such Product or the manufacture or use of such Product”

- b. The following is newly added as Section 3.1(f) of the AB-101 Agreement and Section 3.2(f) of the AB-201 Agreement and the AB-202 Agreement:

“(f) Additional Joint Patent Royalty. GCLC shall pay to Artiva a royalty on the GCLC Net Sales of each Product, the manufacture, use or sale of which is claimed by or uses any Additional Joint Patent, on a country-by-country and Product-by- Product basis during the Product Royalty Term, where the royalty rate shall be equal to 50% of the Product Royalty payable by Artiva for such Product for Net Sales in the Territory. For purposes of the foregoing, **“GCLC Net Sales”** shall mean the gross amount invoiced by GCLC and its Affiliates and sublicensees to Third Party purchasers for the sale or distribution of Products outside the Territory, less the same categories of deductions and offsets described in the definition of Net Sales, as applied in the same manner to Products outside the Territory, that are actually incurred, allowed, accrued, paid or taken and are allocated with respect to such sale or distribution. The foregoing royalty shall be payable on a Product-by-Product and country-by-country basis outside the Territory during the period commencing on the First Commercial Sale of such Product in such country outside the Territory and continuing until the end of the Product Royalty Term.”

- c. The last sentence of Section 4.1 of the AB-101 Agreement is hereby amended and restated as follows:

“Subject to the rights and licenses granted under this Agreement, including the obligations in Section 3.1, any other Selected Product License Agreement and the Option Agreement, each Party shall be entitled to practice, grant licenses to, assign and exploit the Additional Joint Inventions and Additional Joint Patents without the duty of accounting or seeking consent from the other Party within the Party’s respective territory.”

- d. The last sentence of Section 4.1 of both the AB-201 Agreement and the AB-202 Agreement is hereby amended and restated as follows:

“Subject to the rights and licenses granted under this Agreement, including the obligations in Section 3.2, any other Selected Product License Agreement and the Option Agreement, each Party shall be entitled to practice, grant licenses to, assign and exploit the Additional Joint Inventions and Additional Joint Patents without the duty of accounting or seeking consent from the other Party within the Party’s respective territory.”

4. The Research Services Agreement is hereby amended as follows:

- a. Section 5.2 of the Research Services Agreement is hereby amended and restated as follows:

“Section 5.2 Work Product. Unless otherwise agreed by the parties in a Work Order, all right, title and interest in and to Work Product generated in the performance of work

conducted under this Agreement by GCLC's employees, agents, consultants, subcontractors or other representatives, either solely or jointly with employees, agents, consultants or other representatives of Artiva, including all patent and other intellectual property rights therein (collectively with Work Product, the "**Arising Intellectual Property**"), shall be owned based on conception, as follows: (a) Artiva shall own all Arising Intellectual Property conceived solely by employees, agents or independent contractors of Artiva and all intellectual property rights therein (the "**Artiva Arising Intellectual Property**"), (b) GCLC shall own all Arising Intellectual Property conceived solely by employees, agents or independent contractors of GCLC and all intellectual property rights therein (the "**GCLC Arising Intellectual Property**"), and (c) the Parties shall jointly own all Arising Intellectual Property conceived jointly by employees, agents or independent contractors of each Party and all intellectual property rights therein (the "**Joint Arising Intellectual Property**"). GCLC hereby confirms that such Arising Intellectual Property (including, without limitation, Work Product and Results) that fall within the definition of GCLC Core Technology or Selected Product Technology are included in the licenses granted to Artiva under the Master Agreement and the applicable Selected Product License Agreement, respectively.

(a) Upon request of GCLC, Artiva and all employees, agents, consultants and subcontractors of Artiva shall sign and deliver to GCLC all writings and do all such things as may be necessary or appropriate to vest in GCLC all right, title and interest in and to such GCLC Arising Intellectual Property. Unless provided otherwise in the Master Agreement or the applicable Selected Product License Agreement, GCLC may, in its sole discretion, file and prosecute in its own name and at its own expense, patent applications on any patentable inventions within the GCLC Arising Intellectual Property. Upon the request of GCLC, and at GCLC's expense, Artiva shall assist GCLC in the preparation, filing and prosecution of such patent applications and shall execute and deliver any and all instruments necessary to effectuate the ownership of such patent applications and to enable GCLC to file and prosecute such patent applications in any country.

(b) Upon request of Artiva, GCLC and all employees, agents, consultants and subcontractors of GCLC shall sign and deliver to Artiva all writings and do all such things as may be necessary or appropriate to vest in Artiva all right, title and interest in and to such Artiva Arising Intellectual Property. Unless provided otherwise in the Master Agreement or the applicable Selected Product License Agreement, Artiva may, in its sole discretion, file and prosecute in its own name and at its own expense, patent applications on any patentable inventions within the Artiva Arising Intellectual Property. Upon the request of Artiva, and at Artiva's expense, GCLC shall assist Artiva in the preparation, filing and prosecution of such patent applications and shall execute and deliver any and all instruments necessary to effectuate the ownership of such patent applications and to enable Artiva to file and prosecute such patent applications in any country.

(c) The Parties shall cooperate with each other in the preparation, filing and prosecution of Joint Arising Intellectual Property."

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5. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which shall constitute together the same document. The Parties agree that signatures transmitted by electronic means (e.g. facsimile or a scanned version of the executed agreement in PDF format attached to an e-mail) shall bind the Parties. This Amendment is otherwise governed by the terms and conditions of the Agreements, except as amended hereby.

[Signature Page Follows]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

IN WITNESS WHEREOF, each of the undersigned parties have had this Amendment executed by its duly authorized representatives.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan
Printed Name: Fred Aslan
Title: Chief Executive Officer

GC CELL CORPORATION

By: /s/ Dae-Woo Park
Printed Name: Dae-Woo Park
Title: Chief Executive Officer



CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

1. **Introduction**

This Master Agreement for Manufacturing Services (the “*Agreement*”) is entered into as of March 16, 2020 (the “*Effective Date*”), by and between **Artiva Biotherapeutics, Inc.**, a Delaware corporation (“*Artiva*”), with its principal place of business located at 4747 Executive Drive, Suite 1150, San Diego, CA 92121, USA, and **Green Cross Cell Corporation**, a Korean corporation (“*Manufacturer*”), with its principal place of business located at 107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 16924, Republic of South Korea.

2. **Recitals**

Whereas, Manufacturer has regulatory and scientific expertise in the GIMP manufacture of pharmaceutical products and GMP-compliant facilities suitable for the manufacture of pharmaceutical products; and

Whereas, Artiva desires to engage Manufacturer to perform, and Manufacturer is willing to perform, manufacturing services with respect to one or more Products on the terms and subject to the conditions set forth in this Agreement.

Now, therefore, in consideration of the foregoing and the mutual covenants and premises contained in this Agreement, the receipt and sufficiency of which are hereby expressly acknowledged, the parties hereto agree as follows:

3. **Manufacturing Services**

3.1. **Definitions**

- 3.1.1. “**Artiva Technology**” shall have the meaning provided in Section 7.2.
- 3.1.2. “**Batch**” shall mean a specific quantity of Product that is intended to be of uniform character and quality and is produced during the same cycle of Manufacture as defined by the applicable Batch record.
- 3.1.3. “**Batch Documentation**” shall mean all documentation, records (Batch and testing), deviations, investigations, required retain samples, specifications, databases or other work product generated by Manufacturer during and in connection with production of any Product, whether recorded in writing, electronically, or otherwise.
- 3.1.4. “**Certificate of Analysis**” shall mean a written certificate of analysis, signed by an authorized representative of Manufacturer, which confirms that the quantity of Product in a particular Batch Manufactured by Manufacturer has been tested in accordance with the applicable acceptance tests set forth in the Specifications or the Quality Agreement and states that such Batch does or does not meet the Specifications.

- 3.1.5. **“Certificate of Compliance”** shall mean a document, signed by an authorized representative of Manufacturer, attesting that a particular Batch of Product was Manufactured in accordance with GMP, the applicable Manufacturing Process for such Product, and applicable laws, rules and regulations.
- 3.1.6. **“Executive Officers”** means the Chief Executive Officer of Artiva and the Chief Executive Officer of Manufacturer, or such other person (of similar seniority within Artiva or Manufacturer) designated by Artiva or Manufacturer from time to time.
- 3.1.7. **“Facility”** shall mean any Manufacturer facility at which any Product is manufactured, or any Services are performed.
- 3.1.8. **“FD&C Act”** shall mean the United States Federal Food, Drug and Cosmetic Act and regulations promulgated thereunder, as each may be amended from time to time.
- 3.1.9. **“FDA”** shall mean the United States Food and Drug Administration or any successor entity.
- 3.1.10. **“GMP”** shall mean the current good manufacturing practices and standards applicable to phase I/11 clinical trials, as set forth in: (a) Parts 210, 211 and 610 of Title 21 of the U.S. Code of Federal Regulations (21 CFR 210, 21 CFR 211 and 21 CFR 610); and (b) European Community Directive 2003/94/EC and the Rules Governing Medicinal Products in the European Union, Volume 4 (Medicinal Products for Human and Veterinary Use: Good Manufacturing Practice); in each case, as may be amended from time to time after the Effective Date, and as interpreted by ICH Harmonised Tripartite Guidelines applicable to biotechnological/biological products.
- 3.1.11. **“Information”** shall mean any and all technical information and know-how, including without limitation, data, instructions, processes, formulae, trade secrets, expert opinions and other information (in written or other tangible form) including, without limitation, any biological, chemical, pharmacological, toxicological, clinical, assay, control and manufacturing data, biological materials, manufacturing or related technology, analytical methodology, chemical and quality control procedures, protocols, techniques, improvements, specifications and results of experimentation and testing.

- 3.1.12. “Intellectual Property”** shall mean all rights, privileges and priorities provided under applicable supranational, national, federal, state or local law, rule, regulation, statute, ordinance, order, judgment, decree, permit, franchise, license, or other government restriction or requirement of any kind relating to intellectual property, whether registered or unregistered, in any country, including without limitation: (a) all (i) patents and patent applications (including any patent that in the future may issue in connection therewith and all divisions, continuations, continuations-in-part, extensions, additions, registrations, confirmations, reexaminations, supplementary protection certificates, renewals or reissues thereto or thereof), (ii) copyrights and copyrightable works, including reports, software, databases and related items, (iii) trademarks, service marks, trade names, brand names, product names, corporate names, logos and trade dress, the goodwill of any business symbolized thereby, and all common-law rights relating thereto, and (iv) trade secrets; and (b) all registrations, applications, recordings, rights of enforcement, rights of recovery based on past infringement and any and all claims of action related thereto and licenses or other similar agreements related to the foregoing.
- 3.1.13. “Latent Defect”** shall mean a defect that causes a Product to fail to conform to the Specifications or to the warranties provided by Manufacturer hereunder, which defect is not discoverable upon reasonable physical inspection and testing performed pursuant to Section 5.1 and the Quality Agreement but is discovered at a later time (*e.g.*, in the course or as a result of long-term stability studies).
- 3.1.14. “Manufacture” and “Manufacturing”** shall mean any steps, processes and activities necessary to produce a Product, including without limitation, the manufacturing, processing, formulation, fill/finish, handling, labeling, packaging, inspection, quality control testing, release and storage of Product.
- 3.1.15. “Manufacturer Background Technology”** shall mean all Information that Manufacturer uses in the manufacture of, or performance of manufacturing and development services with respect to, pharmaceutical products on behalf of its clients and any Intellectual Property pertaining thereto, that is either: (a) owned or controlled by Manufacturer on the Effective Date (other than as a result of any disclosure or provision of the same to Manufacturer by or on behalf of Artiva); or (b) developed or acquired, and owned or controlled, by Manufacturer during the Term independently of any activities conducted pursuant to this Agreement.
- 3.1.16. “Manufacturer Improvement”** shall mean any improvement to the Manufacturer Background Technology that: (a) is made solely by Manufacturer in the course of performing Services; (b) is not specific to the Manufacture of Product; and (c) does not use or incorporate any Product or Confidential Information of Artiva (including any Confidential Information of any third party provided to Artiva).
- 3.1.17. “Manufacturer Technology”** shall mean Manufacturer Background Technology and Manufacturer Improvements.

- 3.1.18. **“Manufacturing Process”** shall mean any and all processes (including any step in any such process) used, or planned to be used, by Manufacturer to Manufacture a Product, as evidenced in the Master Batch Record for such Product.
- 3.1.19. **“Master Batch Record”** shall mean the formal set of instructions for the Manufacture of any Product.
- 3.1.20. **“Materials”** shall mean starting materials, cell lines, reagents, cell culture media or processing formulations, components, excipients, other ingredients and packaging and labeling materials used in the Manufacture of any Product.
- 3.1.21. **“Non-Fault Delay”** means a delay in the Services caused by technical difficulties that are not caused by Manufacturer and are outside the reasonable control of Manufacturer.
- 3.1.22. **“Product”** shall mean any biological or chemical product manufactured or to be manufactured by the Manufacturer for use in phase I and II clinical trials in accordance with each Work Order.
- 3.1.23. **“Product Warranty”** shall have the meaning provided in Section 9.3.1.
- 3.1.24. **“Quality Agreement”** shall mean a written agreement between Artiva and Manufacturer to be entered into prior to initiation of Manufacturing of any Product that defines the quality roles and responsibilities of each party in connection with the Manufacture of such Product, in substantially the form attached hereto as **Exhibit B**.
- 3.1.25. **“Quality Representative”** shall mean the individual named as a Quality Representative in the Work Order and/or in any Quality Agreement signed by both parties.
- 3.1.26. **“Records”** shall have the meaning provided in Section 3.3.8.
- 3.1.27. **“Results”** shall have the meaning provided in Section 3.3.5.
- 3.1.28. **“Services”** shall mean any and all Manufacturing activities performed, or to be performed, by Manufacturer with respect to any Product pursuant to this Agreement, as more fully set out in a Work Order entered into by the parties.

- 3.1.29.** “**Specifications**” shall mean, with respect to a particular Product, a list of tests, references to analytical procedures, and appropriate acceptance criteria that are numerical limits, ranges, or other criteria for the tests described, which establishes the set of criteria to which such Product should conform to be considered acceptable for its intended use, in each case, as in effect from time to time. The Specifications for any Product to be supplied by Manufacturer to Artiva or its designee pursuant to any Work Order (including any amendment to such Specifications) shall be provided by Artiva and attached as an exhibit to such Work Order or to the corresponding Quality Agreement.
- 3.1.30.** “**Term**” shall have the meaning provided in Section 10.1.
- 3.1.31.** “**Work Order**” shall mean a written work order for the performance of Services by Manufacturer under this Agreement, on terms and in a form mutually acceptable to the parties, signed by duly authorized representatives from both parties and referencing this Agreement.
- 3.1.32.** “**Work Product**” shall mean any and all data and results (including Results) and Products (interim and/or final) of the Services performed by Manufacturer, whether tangible or intangible, including, without limitation, all inventions, discoveries, developments, innovations, methods, techniques, protocols, processes, procedures, specifications, trade secrets, know-how, modifications, enhancements, improvements, substances, materials, writings and documentation (whether or not protectable under patent, trademark, copyright or other intellectual property laws), that are made, developed, perfected, designed, conceived or first reduced to practice by Manufacturer’s employees, agents, consultants, subcontractors or other representatives, either solely or jointly with employees, agents, consultants or other representatives of Artiva, in the course and as a result of performing the Services; *but excluding* Manufacturer Technology.

3.2. Project Coordination

Within ten (10) days after the date hereof, Artiva and Manufacturer shall each appoint an authorized representative and a back-up representative for the exchange of all communications, other than legal notices, related to the Services. Each party shall provide notice to the other party as to the name and title of the individuals so appointed. Each party may replace its coordinators at any time for any reason by providing written notice to the other party in accordance with Section 14.

3.3. Scope of Services

- 3.3.1. Scope of Agreement.** As a master form of contract, this Agreement allows the parties to contract for multiple Services through the issuance of multiple Work Orders, without having to re-negotiate the basic terms and conditions contained herein.

- 3.3.2. Performance of Services.** The specific Manufacturing activities to be performed by Manufacturer with respect to a Product shall be separately specified in writing in a Work Order. Each Work Order shall be signed by both parties, shall be attached to this Agreement as part of **Exhibit A**, and shall set forth, upon terms mutually agreeable to the parties, the specific Services to be performed by Manufacturer, the time line and schedule for the performance of such Services and the compensation to be paid by Artiva to Manufacturer for the provision of such Services, as well as any other relevant terms and conditions. If any such Services include a technical process transfer or the production of specific deliverables (including, without limitation, engineering or validation Batches of Product, reports, Master Batch Records, Batch Documentation, and analytical results), the specifications of such technical process transfer or deliverables shall be set forth on the relevant Work Order. Each Work Order shall be subject to all of the terms and conditions of this Agreement, in addition to the specific details set forth in the Work Order. To the extent any terms or provisions of a Work Order conflict with the terms and provisions of this Agreement, the terms and provisions of this Agreement shall control, unless the Work Order expressly states the intent of the parties that a particular provision of such Work Order supersede this Agreement. The parties shall attach a copy of each Work Order to this Agreement, and each such Work Order shall be incorporated herein by reference. Any changes to such Work Order shall be in writing, executed by each party, attached to the original Work Order and incorporated therein and attached hereto as part of **Exhibit A**.
- 3.3.3. Compliance with Work Orders, Law and Schedule.** Manufacturer agrees to perform the Services set forth in each Work Order in a competent and professional manner and in strict accordance with the terms and conditions contained in this Agreement and such Work Order. Manufacturer shall perform its obligations hereunder, including but not limited to manufacturing Product for Artiva's phase I/II clinical trials, in conformance with all applicable federal, state and local statutes, rules and regulations, including, without limitation, GMP (except to the extent otherwise specified in a Work Order) and the FD&C Act. Manufacturer shall use commercially reasonable efforts to perform the Services for Artiva's clinical trials under each Work Order in accordance with the time line and schedule set forth in such Work Order. Manufacturer shall notify Artiva in writing promptly upon becoming aware of any circumstance that will, or could reasonably be expected to, result in any delay in performance of the Services, and the parties shall cooperate in good faith to avoid or minimize any such delay.
- 3.3.4. Artiva's Approval of Subcontractors.** Manufacturer shall not subcontract any of the Services under a Work Order to any affiliated entity or any third party without first obtaining Artiva's prior written consent. Manufacturer will at all times be responsible for the compliance of its subcontractors with the terms and conditions of this Agreement and the applicable Work Order.

- 3.3.5. Information and Material Transfer by Artiva.** Artiva must deliver and successfully transfer to Manufacturer all Materials and Information described in the relevant Work Order, including, without limitation, a full description of the Manufacturing Process to enable Manufacturer to manufacture the Product. All Information must be provided in written form and in English.
- 3.3.6. Results.** All data generated by Manufacturer or its employees, agents, consultants, Artiva-approved subcontractors or other representatives in the course of conducting Services, whether in written, graphic or electronic form or contained in any computer database or in any computer readable form (collectively, the “**Results**”), will be owned solely by Artiva. Manufacturer shall record, or cause to be recorded, all Results in a timely, accurate and complete manner consistent with the industry standards that are applicable to the Manufacturing of a Product for use in phase I and II clinical trials. All Results collected shall be delivered to Artiva by Manufacturer in a timely manner throughout the performance of Services, and in no event later than [***] business days after (a) the date of completion or termination of such Services; or (b) such earlier date on which Artiva otherwise requests delivery of the Results. For purposes of clarification, this section shall apply to each Work Order individually. Artiva shall have the right to review, publish, disclose and use any Results as Artiva, in its sole discretion, deems appropriate, including, without limitation, in submission to any U.S. or foreign regulatory authority. Any copyrightable work created in connection with the performance of the Services and contained in or relating to the Results will be considered a work made for hire, whether published or unpublished, and all rights therein will be the property of Artiva as author and owner of copyright in such work.
- 3.3.7. Information Transfer.** If Artiva elects to Manufacture Product itself; or to have Product Manufactured by a third party, Manufacturer will provide to Artiva, or its designee, all Manufacturing information, including, without limitation, Records, copy of the Master Batch Records, SOPs, documentation, technical assistance, materials and cooperation by appropriate employees of Manufacturer as Artiva or its designee may reasonably require in order to Manufacture Product. It is the intention of the parties that Artiva or its third party designee be able to replicate any Manufacturing Process developed by Manufacturer as part of the Services, and to Manufacture each Product in the same manner as Manufacturer Manufactured such Product pursuant to this Agreement, and the parties shall discuss and agree in good faith within [***] months of the Effective Date on a technology transfer plan for the parties to implement this Section 3.3.7. Artiva will compensate Manufacturer for such assistance at reasonable hourly rate(s) set forth in the applicable Work Order, or such other reasonable rate(s) as the parties may agree in writing.

3.3.8. Documentation. Manufacturer shall keep complete and accurate records related to the Services, including, without limitation, reports, accounts, notes, data and records of all information and results, both in written and electronic form (collectively, “**Records**”). All Records will be the sole property of Artiva. Upon Artiva’s request, Manufacturer will promptly provide Artiva with complete and accurate copies of such Records. Manufacturer will not transfer, deliver or otherwise provide any such Records to any party other than Artiva, without the prior written approval of Artiva. While in the possession or control of Manufacturer, Records will be made available for inspection, examination and copying by or on behalf of Artiva. All original Records will be retained and archived by Manufacturer in accordance with GMP and applicable laws, rules and regulations, but in no case for less than [***] years following completion of the applicable Work Order (the “**Retention Period**”). Following the Retention Period, Manufacturer will not destroy the Records without first giving Artiva written notice and the opportunity to further store the Records at Artiva’s expense, or to have the Records transferred to Artiva or its designee at Artiva’s expense.

4. Payment

- 4.1. Estimated Cost Budget.** Each Work Order shall contain an estimated budget of service fees and out-of-pocket costs (“**Price**”) to be incurred in the performance of Services under such Work Order, as well as additional terms and conditions relating to such estimated budget. Manufacturer shall provide to Artiva, at intervals stated in each Work Order, an accounting of costs incurred to date for Services under such Work Order and shall notify Artiva promptly in writing upon becoming aware that actual costs are likely to exceed budgeted costs.
- 4.2. Invoices; Payment.** Unless otherwise agreed by the parties in writing, Manufacturer shall provide to Artiva for each Work Order one or more separate invoices (to be delivered at intervals specified in such Work Order), each such invoice summarizing the Services performed during that period of time under that Work Order, the fees due under such Work Order for the performance of such Services, and the costs incurred in connection therewith. Artiva shall pay each undisputed invoice within [***] days of receipt thereof, in accordance with the applicable schedule of payments specified in such Work Order, except in the case of any undisputed invoice for the final payment installment for Batch(es) of Product supplied under a Work Order, which Artiva shall pay within [***] days after approval by Artiva’s Quality Representative of Batch Documentation, the Certificate of Analysis and the Certificate of Compliance for the applicable Batch(es). Artiva shall not be obligated to pay any amounts in excess of the fees and budgeted costs specified in a Work Order that have not been approved in writing by Artiva in advance.
- 4.3. Disputed Invoices.** If Artiva, in good faith, disputes the accuracy of any amounts invoiced pursuant to Section 4.2, Artiva shall provide written notice stating the reasons why the remaining disputed amount is incorrect, along with supporting documentation within [***] days from the date of invoice. In the event the parties are unable to resolve

such dispute, Manufacturer may pursue any remedy available at law or in equity to enforce its rights hereunder. In the event that it is determined or agreed that Artiva must or will pay the disputed amount, then Artiva shall pay interest from and including the original payment due date until, but excluding, the date the disputed amount is received by Manufacturer, at the rate referenced in Section 4.4 below.

- 4.4. **Late Payment.** If any payment due under this Agreement is not paid when due, Artiva agrees to pay to Manufacturer interest thereon from the date due at a rate per annum that is equal to [***], or at the maximum rate permitted by law.
- 4.5. **Financial Records.** Manufacturer will keep accurate financial records of all Services performed and invoice calculations, and, upon the request of Artiva, will permit Artiva or its duly authorized agents to examine such records during normal business hours for the purpose of verifying the correctness of all such calculations.
- 4.6. **Taxes.** All Prices shall be exclusive of VAT. Artiva shall, with respect to any laws, statutes, decree, rules, or regulations in effect on the Effective Date, be solely responsible for, shall bear and shall pay any and all government taxes and other charges imposed upon, arising out of or related to the manufacture, delivery and sale of Product to Artiva which are levied and assessed by any governmental jurisdiction or subdivision (other than taxes based upon Manufacturer's income or assets). Such taxes and other charges shall include, by way of illustration and not limitation, value added taxes, excise taxes, sales tax and customs. Artiva shall indemnify and save Manufacturer harmless from and against the results of Artiva's failure to pay any such taxes and charges. Taxes (and any penalties thereon) imposed on any payment made by Artiva to Manufacturer shall be the responsibility of Manufacturer.

5. Manufacturing Capacity and Cancellation Fees

- 5.1. **Cancellation of GMP Batches.** Artiva must pay Manufacturer the cancellation fees stated below if any Manufacturing schedule at the Facility is cancelled as a result of: [***] (each, a "**Cancelled Batch**").

Timing of Notice of Cancellation

Cancellation Fees

Notice served on or after the scheduled commencement date of Manufacture of a Batch. [***]

Notice served within [***] days [***]

before the scheduled commencement date of Manufacture of a Batch. [***]

For the purpose of this Section, the date of notice of a Cancelled Batch is the earlier of: [***].

6. Product Acceptance and Delivery.

- 6.1. Acceptance.** Prior to the delivery of any Batch of Product and within [***] days of completion of such Batch, Manufacturer shall provide Artiva or a third party designated by Artiva with appropriate mutually agreed upon Batch Documentation in accordance with the Work Order. Batch acceptance criteria are defined in the Work Order. Artiva will review the Batch Documentation for each Batch of Product. Artiva will notify Manufacturer in writing of its acceptance or rejection of such Batch within [***] days of receipt of the complete Batch Documentation; *provided, however*, that in the case of a Batch of Product having any Latent Defect that is [***], Artiva may reject such Batch by giving written notice to Manufacturer of Artiva's rejection thereof within [***] days after delivery of such Batch, but such notice may in no event be given later than the applicable expiration date of such Batch. During the [***] review period specified above, the parties agree to respond promptly within [***] days, to any reasonable inquiry by the other party with respect to the Batch Documentation.
- 6.2. Delivery.** Except as otherwise specified in a Work Order, all shipments of Product shall be shipped FCA (Incoterms 2010) to Artiva's designated logistics facility. Artiva has the responsibility of delivery from the place that Manufacturer delivers the Products to Artiva's clinical sites. Manufacturer shall deliver the Product within the period of delivery set forth in the Work Order and provide Artiva with advance notice of the anticipated date of delivery of Product. Notice will be provided at least [***] business days before Manufacturer is to deliver that Product. If Artiva is unable to receive the Product at the time of delivery, Manufacturer will store or delay the delivery of the Product at Artiva's request and reasonable expense in accordance with the appropriate Work Order. Manufacturer will package and ship Product in accordance with Artiva's instructions. A bill of lading will be furnished to Artiva with respect to each shipment. Artiva or its designee will conduct a quality check on delivered Products, including of container labels and container integrity, and will promptly notify Manufacturer in writing of loss, damage, defects or non-delivery of any part of a Product shipment within [***] business days after receipt of such shipment by Artiva or its designee, and if any loss, damage, defects or partial non-delivery are not evident to Artiva or its designee at the time of delivery, such notification by Artiva to Manufacturer will be made no later than [***] days after receipt as stipulated in Section 6.1 above.
- 6.3. Incidents or Accidents.** Manufacturer shall immediately notify Artiva in writing of any incident or accident experienced by Manufacturer that Manufacturer believes may affect the quality of the Product that Manufacturer is obligated to deliver hereunder or its ability to meet delivery date obligations hereunder. Manufacturer shall promptly investigate such incident or accident and shall provide a written report within [***] business days of the results of the investigation of such incidence or accident to Artiva.

7. **Intellectual Property.**

- 7.1. **Pre-Existing Intellectual Property.** Each party retains sole ownership of any Intellectual Property owned or controlled by that party as of the Effective Date or before the commencement of the Services (“**Pre-Existing IPR**”). Artiva hereby grants to Manufacturer a limited non-exclusive, non-transferable, non-sublicensable, revocable, royalty-free license under Artiva’s Pre-Existing IPR that is necessary or useful for the performance of Manufacture of Products solely to the extent necessary for Manufacturer to Manufacture the Product for Artiva and conduct the Services in accordance with the terms of this Agreement. Artiva shall inform Manufacturer of any relevant developments to its Pre-Existing IPR related to the Products so as to enable Manufacturer to use such developed Pre-Existing IPR for the purpose of Manufacturing the Product as part of the Services. Nothing in this Agreement assigns or transfers ownership or any other rights with respect to Pre-Existing IPR except as expressly stated herein.
- 7.2. **Artiva Technology.** Manufacturer shall promptly disclose to Artiva in writing all Work Product arising under this Agreement. All rights to Work Product, including all patent and other intellectual property rights therein (collectively, “**Artiva Technology**”), will be owned solely by Artiva, and Manufacturer hereby assigns all right, title and interest in and to Artiva Technology to Artiva; *provided, however*, that Artiva Technology shall not include Manufacturer Technology. Manufacturer shall cause any and all inventions and discoveries, whether or not patentable, constituting Work Product to be collected and recorded in a timely, accurate, complete and professional manner sufficient for patent purposes. Manufacturer and all employees, agents, consultants and subcontractors of Manufacturer shall sign and deliver to Artiva all writings and do all such things as may be necessary or appropriate to vest in Artiva all right, title and interest in and to Artiva Technology. Artiva may, in its sole discretion, file and prosecute in its own name and at its own expense, patent applications on any patentable inventions within the Work Product. At the request and expense of Artiva, Manufacturer shall assist Artiva in the preparation, filing and prosecution of such patent applications and will execute and deliver any and all instruments necessary to effectuate the ownership of such patent applications and to enable Artiva to file and prosecute such patent applications in any country.
- 7.3. **Manufacturer Technology.** Work Product and Artiva Technology shall not include Manufacturer Technology, and, as between the parties, all Manufacturer Technology shall be owned solely by Manufacturer. In order to provide Artiva with freedom to operate with respect to Products, Manufacturer hereby grants to Artiva a limited worldwide, royalty-free, fully-paid, non-exclusive license, including the right to sublicense through multiple tiers of sublicense to Artiva’s Affiliates or third party

contract manufacturers of Product, under Manufacturer Technology actually used by Manufacturer in the Manufacture of any Product pursuant to this Agreement solely to make, have made, use, sell, have sold, offer for sale and import such Product. However, this license does not include the right to disclose any Confidential Information of Manufacturer or Manufacturer Technology to a third party that is not a permitted sublicensee without the express prior written consent of Manufacturer. This license automatically terminates if Manufacturer terminates this Agreement under Section 10.3.

8. CONFIDENTIALITY

- 8.1. Definition of Confidential Information.** For purpose of this Agreement, “*Confidential Information*” shall mean, subject to Section 8.3, all Information provided by or on behalf of a party (the “*Disclosing Party*”) to the other party (the “*Receiving Party*”) in connection with any Services, whether in oral, written, graphic or electronic form. Notwithstanding the foregoing, all Artiva Technology shall be deemed the Confidential Information of Artiva, regardless of which party initially discloses the same to the other party, and Artiva shall be deemed the “Disclosing Party” and Manufacturer the “Receiving Party” with respect thereto.
- 8.2. Confidentiality Obligation.** During the Term and for a period of [***] years thereafter, each party will maintain all Confidential Information (as defined below) of the other party as confidential and will not disclose any such Confidential Information or use any such Confidential Information for any purpose, except: (a) as expressly authorized by this Agreement, (b) as permitted by Section 8.4, or (c) to its employees, agents, consultants, subcontractors and other representatives (“*Representatives*”) who require access to such information to accomplish the purposes of this Agreement so long as such Representatives are under obligations regarding the confidentiality of the other party’s Confidential Information, and, in the case of Manufacturer’s Representatives, the ownership of Artiva Technology, that are consistent with and no less protective to the other party than the terms of this Agreement. Neither party shall allow access to the Confidential Information of the other party to any Representative of such party who does not require such access in order to perform such party’s obligations under, or to otherwise to accomplish the purposes of, this Agreement. The Receiving Party (defined above) may use the Confidential Information of the Disclosing Party only to the extent required to accomplish the purposes of this Agreement. The Receiving Party will use at least the same standard of care as it uses to protect its own confidential information to ensure that its Representatives do not disclose or make any unauthorized use of the Confidential Information. The Receiving Party will promptly notify the Disclosing Party upon discovery of any unauthorized use or disclosure of the Confidential Information.

- 8.3. Exceptions.** Confidential Information will not include any information which the Receiving Party can demonstrate by competent evidence: (a) is now, or hereafter becomes, through no act or failure to act on the part of Receiving Party or any of its employees, agents, consultants or subcontractors, generally known or available; (b) is known by the Receiving Party at the time of receiving such information; (c) is hereafter furnished to the Receiving Party by a third party, as a matter of right and without restriction on disclosure; or (d) is independently developed by an employee or agent of the Receiving Party without knowledge and use of the Disclosing Party's Confidential Information, as evidenced by the Receiving Party's contemporaneously-maintained written records.
- 8.4. Authorized Disclosure.** Notwithstanding Section 8.2, the Receiving Party may disclose Confidential Information, without violating its obligations under this Agreement, to the extent the disclosure is required by a valid order of a court or other governmental body having jurisdiction, provided that the Receiving Party gives reasonable prior written notice to the Disclosing Party of such required disclosure and, at the Disclosing Party's request and expense, cooperates with the Disclosing Party's efforts to obtain a protective order preventing or limiting the disclosure and/or requiring that the Confidential Information so disclosed be used only for the purposes for which the law or regulation requires, or for which the order was issued.

9. REPRESENTATIONS AND WARRANTIES

- 9.1. Mutual Representations and Warranties.** Each party represents and warrants to the other party that (a) such party is duly organized, validly existing, and in good standing under the laws of the place of its establishment or incorporation, (b) such party has taken all action necessary to authorize it to enter into this Agreement and perform its obligations under this Agreement, (c) this Agreement will constitute the legal, valid and binding obligation of such party, and (d) neither the execution of this Agreement nor the performance of such party's obligations hereunder will conflict with, result in a breach of, or constitute a default under any provision of the organizational documents of such party, or of any law, rule, regulation, authorization or approval of any government entity, or of any agreement to which it is a party or by which it is bound.
- 9.2. Artiva Representations and Warranties.**
- 9.2.1.** Artiva represents and warrants to Manufacturer that Artiva has all necessary rights to supply to Manufacturer the Information and Manufacturing Process as stipulated in the relevant Work Order and the Artiva Pre-Existing IPR, and Manufacturer has been granted the limited right to use those items for the performance of the Services and Manufacture of the Product as set forth in this Agreement.
- 9.2.2.** The Information and Manufacturing Process provided by Artiva to Manufacturer as stipulated in the relevant Work Order is accurate and complete in all material respects for purposes of enabling Manufacturer to perform the Services and Manufacture of the Product according to the relevant Specification.

9.3. Manufacturer Representations and Warranties.

9.3.1. Manufacturer represents and warrants to Artiva that all Product delivered by Manufacturer hereunder: (i) will, at the time of delivery, conform to the applicable Specifications in effect at the time of delivery; (ii) will have been Manufactured in compliance with GMP and the Quality Agreement and in accordance with the Manufacturing Process as described in the Master Batch Record (clauses (i) and (ii), collectively, the “**Product Warranty**”); and (iii) will be free and clear of any lien or encumbrance.

9.3.2. Manufacturer further represents and warrants to Artiva that: (i) it has and will maintain during the Term all government permits, including, without limitation, health, safety and environmental permits, necessary for the conduct of the actions and procedures that it undertakes pursuant to this Agreement; (ii) each of its Representatives performing any portion of the Services shall have executed, prior to initiating such Services, a binding written agreement under which each such Representative (A) agrees to confidentiality obligations no less restrictive than those set forth herein and (B) assigns, and agrees to assign, all right, title and interest in and to Results and Artiva Technology to Manufacturer so that Manufacturer may comply with its obligations under Article 7 and (iii) it will comply with the terms of the Quality Agreement.

9.4. No Debarment. Manufacturer hereby represents, warrants and certifies that neither it nor any of its affiliated companies performing any Services hereunder is under investigation by the FDA or any other Regulatory Authority for debarment or is presently debarred by the FDA or any other Regulatory Authority pursuant to 21 U.S.C. § 335a or its successor provisions or any similar law in any other country. In addition, Manufacturer represents, warrants and certifies that it has not engaged in any conduct or activity which could lead to any of the above-mentioned debarment actions. If, during the Term, Manufacturer or any of its affiliated companies performing any Services hereunder (i) is debarred, (ii) comes under investigation by the FDA or any other Regulatory Authority for a debarment action, or (iii) engages in any conduct or activity that could lead to any of the above-mentioned debarment actions, Manufacturer shall immediately notify Artiva of same. In the event that Manufacturer or any of its affiliated companies performing any Services hereunder becomes debarred as set forth in clause (i) above, this Agreement will automatically terminate without any further action or notice by either party. In the event that Manufacturer or any of its affiliated companies performing any Services hereunder receives notice of action or threat of action as set forth in clause (ii) above, or Artiva becomes aware of any conduct or activity by Manufacturer or any of its affiliated companies performing Services hereunder that could lead to debarment, Artiva shall have the right to terminate this Agreement immediately upon written notice to Manufacturer.

- 9.5. Debarred Persons.** Manufacturer represents, warrants and covenants that, to the best of its knowledge, neither it nor any of its affiliated companies performing the Services shall employ, contract with, or retain any person directly or indirectly to perform any Services under this Agreement if such a person is under investigation by the FDA or any other Regulatory Authority for debarment or is presently debarred by the FDA or any other Regulatory Authority pursuant to 21 U.S.C. § 335a or its successor provisions or any similar law in any other country. If, during the Term, any person employed or retained by Manufacturer or any of its affiliated companies to perform any Services (i) comes under investigation by the FDA or any other Regulatory Authority for a debarment action, (ii) is debarred, or (iii) engages in any conduct or activity that could lead to any of the above-mentioned debarment actions, Manufacturer shall immediately notify Artiva of same, and Artiva shall have the right to terminate this Agreement immediately upon written notice to Manufacturer.
- 9.6. Disclaimer of Warranties.** EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATION OR WARRANTY TO THE OTHER PARTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE.
- 9.7. Limitation of Liability.**
- 9.7.1.** Manufacturer's liability to Artiva for any loss or damage suffered by Artiva as a result of breach of this Agreement or any other liability under this Agreement or in connection with the Services is limited, in the aggregate, to [***].
- 9.7.2.** EXCEPT IN THE CASE OF BREACH OF ARTICLE 8, IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR ANY LOST PROFITS, LOST SAVINGS, OR ANY OTHER INCIDENTAL, SPECIAL, PUNITIVE, EXEMPLARY, OR CONSEQUENTIAL DAMAGES, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT
- 9.7.3.** Section 9.6.1 or Section 9.6.2 shall not be construed to limit either party's indemnification obligations with respect to third party claims under Article 11.

10. **TERM, TERMINATION**

- 10.1. Term.** The term of this Agreement (the “*Term*”) shall commence on the Effective Date and, subject to earlier termination of this Agreement as provided in this Article 10 or extension by mutual written agreement of the parties, shall continue until the five (5) year anniversary of the Effective Date, except that, unless otherwise mutually agreed to in writing, if Services under any Work Order which have been validly executed prior to the expiration or termination of this Agreement are in progress on the five (5) year anniversary of the Effective Date, this Agreement shall expire upon completion of such Services.
- 10.2. Termination of Agreement At Will.** Artiva may terminate this Agreement at any time without cause upon six (6) months’ prior written notice to Manufacturer. Artiva may terminate any Work Order at any time without cause upon sixty (60) days’ prior written notice to Manufacturer. Manufacturer may terminate this Agreement, for any reason or no reason upon six (6) months’ prior written notice to Artiva. Notwithstanding the foregoing, if Services under any Work Order are in progress on the date on which Manufacturer gives notice under this Section 10.2, then, at Artiva’s option, termination under this Section 10.2 shall not be effective until the later of (a) the end of the six (6)-month notice period set forth in the preceding sentence, or (b) the date on which the Services provided under the Work Order have been completed.
- 10.3. Termination of Agreement for Material Breach.** A party may terminate this Agreement or any Work Order for material breach of this Agreement by the other party upon thirty (30) days’ written notice specifying the nature of the breach, if such breach has not been cured within such 30-day period. If such notice of breach is for breach of a Work Order, such notice shall note the specific Work Order under which such breach is claimed.
- 10.4. Termination for Scientific or Technical Difficulties.** Manufacturer may terminate any Work Order on sixty (60) days’ prior written notice to Artiva if Manufacturer reasonably concludes that it is not technically or scientifically feasible to deliver the Services contemplated by such Work Order despite applying its commercially reasonable efforts, but only if such non-feasibility is not caused by Manufacturer and is outside of Manufacturer’s reasonable control (such determination, the “*Non-Feasibility Determination*”). Manufacturer shall notify Artiva immediately of any Non-Feasibility Determination, including reasonable details to support such determination, and for the sixty (60) day period thereafter, the parties shall in good faith discuss the relevant scientific and technical issues in an attempt to resolve those problems. If the parties agree during those discussions that it is in fact technically and scientifically feasible for Manufacturer to deliver the Services, then the applicable Work Order shall not terminate and will continue in effect. If such an agreement cannot be reached during the sixty (60) day period, the applicable Work Order will terminate on expiration of the sixty (60) day notice period. Artiva may immediately terminate any Work Order for a Non-Fault Delay in the Services under such Work Order.

- 10.5. Payment upon Early Termination.** Upon termination or expiration of this Agreement or termination of any Work Order(s), neither Manufacturer nor Artiva shall have any further obligations under this Agreement or such Work Order(s), except as set forth in Section 10.6 and except that with respect to each terminated Work Order:
- 10.5.1.** Manufacturer shall terminate all Services in progress, including subcontracted Services, in an orderly manner as soon as practical and in accordance with a schedule agreed to by Artiva, unless Artiva specifies in the notice of termination that Services in progress should be completed;
 - 10.5.2.** Manufacturer shall use commercially reasonable efforts to return to the vendor for a refund all unused, returnable material in Manufacturer's possession that are related to any such Work Order(s);
 - 10.5.3.** Artiva (i) shall purchase from Manufacturer any existing inventories of Product conforming to the Specifications and Manufactured in accordance with GMP (if applicable) and the Manufacturing Process, at the price for such Product set forth in the applicable Work Order, and (ii) may either purchase any Product in process held by Manufacturer as of the date of the termination or direct Manufacturer to dispose of such material, in each instance, at a price to be mutually agreed (it being understood that such price will reflect, on a pro rata basis, work performed and non-cancelable out-of-pocket expenses actually incurred by Manufacturer with respect to the Manufacture of such in-process Product); and
 - 10.5.4.** Within thirty (30) days after the termination of any Work Order(s), Manufacturer will provide to Artiva a written itemized cost statement of all Services performed in connection with the terminated Work Order(s) and a final invoice for such Work Order(s). If Artiva has paid to Manufacturer in advance more than the amount in a final invoice, then Manufacturer agrees to refund the excess payment to Artiva, or to credit the excess payment toward any other existing or future Work Order(s), at the election of Artiva.
 - 10.5.5.** Subject to payment by Artiva of Manufacturer's final invoice pursuant to Section 10.5.4, Manufacturer shall deliver to Artiva all Artiva-supplied Materials, equipment supplied by Artiva, all Work Product not previously delivered to Artiva, Product, retained samples (except for samples Manufacturer is required to retain pursuant to applicable law), Records, data, reports and other property, information and/or know-how in recorded form that was provided by Artiva, or developed in the performance of the Services.

- 10.6. Consequences of Termination.** In the event of termination or expiration of this Agreement, Manufacturer shall provide reasonable assistance to Artiva to implement the transfer of Manufacturing responsibility for Products to Artiva or its designee. Such reasonable assistance shall include transfer of all processes, procedures, know-how and data required to Manufacture Products conforming to the Specifications (as in effect at the time of such termination) in accordance with the Manufacturing Process and FDA guidelines, including assistance of Manufacturer personnel in compiling and transferring this information. In the event of termination of this Agreement by Artiva pursuant to Section 10.3, such reasonable assistance will be provided at Manufacturer's expense. In the event of any other termination of this Agreement, Artiva shall compensate Manufacturer at commercially reasonable hourly rate(s) to be mutually agreed by the parties for the time spent by Manufacturer employees in providing such assistance and reimburse the reasonable and documented costs incurred by Manufacturer in providing such assistance.
- 10.7. Survival.** Expiration or termination of this Agreement will not relieve the parties of any obligation accruing prior to such expiration or termination. Sections 3.3.5, 3.3.7, 3.3.8, 4.3, 6.1, 6.3, 9.6, 9.7, 10.5, 10.6 and 10.7 and Articles 7, 8, 11, 12, 13, 14, 15, 16 and 17 will survive expiration or termination of this Agreement.

11. INDEMNIFICATION; LIABILITY

- 11.1. Artiva Indemnification.** Artiva hereby agrees to save, defend, indemnify and hold harmless Manufacturer and its officers, directors, employees, consultants, contractors and agents ("**Manufacturer Indemnitees**") from and against any and all losses, damages, liabilities, expenses and costs, including reasonable legal expense and attorneys' fees ("**Losses**"), to which any such Manufacturer Indemnatee may become subject as a result of any claim, demand, action or other proceeding by any third party to the extent such Losses arise out of: (a) the material breach by Artiva of any representation, warranty, covenant or agreement made by it under this Agreement or the Quality Agreement; (b) the gross negligence or willful misconduct of any Artiva Indemnatee; or (c) the development, manufacture, use, handling, storage, sale or other disposition of any Product by or on behalf of Artiva (including, without limitation, any claim by any third party that the development, manufacture, use, handling, storage, sale or other disposition of any Product infringes or misappropriates the intellectual property rights of such third party, except to the extent such claim relates solely to Manufacturer Technology used in connection therewith); except, in each case, to the extent such Losses result from the material breach by Manufacturer of any representation, warranty, covenant or agreement made by it under this Agreement or the gross negligence or willful misconduct of any Manufacturer Indemnatee.
- 11.2. Manufacturer Indemnification.** Manufacturer hereby agrees to save, defend, indemnify and hold harmless Artiva and its officers, directors, employees, consultants, contractors and agents ("**Artiva Indemnitees**") from and against any and all Losses to which any such Artiva Indemnatee may become subject as a result of any claim, demand, action or other proceeding by any third party to the extent such Losses arise out of: (a)

the material breach by Manufacturer of any representation, warranty, covenant or agreement made by it under this Agreement or the Quality Agreement, or (b) the gross negligence or willful misconduct of any Manufacturer Indemnitee; except, in each case, to the extent such Losses result from the, material breach by Artiva of any representation, warranty, covenant or agreement made by it under this Agreement, or the gross negligence or willful misconduct of any Artiva Indemnitee.

11.3. Control of Defense. In the event a party seeks indemnification under Section 11.1 or 11.2, it shall inform the other party (the “**Indemnifying Party**”) of a claim as soon as reasonably practicable after it receives notice of the claim, shall permit the Indemnifying Party to assume direction and control of the defense of the claim (including the right to settle the claim solely for monetary consideration provided that such settlement does not involve any admission wrongdoing on the part of the indemnified party), and shall cooperate as requested (at the expense of the Indemnifying Party) in the defense of the claim.

12. INSURANCE Manufacturer, at its own expense, shall maintain appropriate insurance (or self-insure) in an amount consistent with sound business practice and reasonable in light of its obligations under this Agreement during the Term, including insurance covering loss or damage to the Facility and Artiva’s property and materials in the care, custody and control of Manufacturer, valued at replacement cost. Manufacturer shall provide a certificate of insurance (or evidence of self-insurance) evidencing such coverage to Artiva upon request.

13. DISPUTE RESOLUTION

13.1. Disputes. The parties recognize that disputes as to certain matters arising under or relating to this Agreement or either party’s rights or obligations hereunder may from time to time arise. It is the objective of the parties to establish procedures to facilitate the resolution of disputes arising under this Agreement in an expedient manner by mutual cooperation and without resort to litigation. To accomplish this objective, the parties agree to follow the procedures set forth in this Article 13 to resolve any controversy or claim arising out of, relating to or in connection with any provision of this Agreement, if and when a dispute arises under this Agreement.

13.2. Internal Resolution. With respect to all disputes arising between the parties under this Agreement, including any alleged breach under this Agreement or any issue relating to the interpretation or application of this Agreement, if the parties are unable to resolve such dispute within [***] days after such dispute is first notified by either party in writing to the other, the parties shall refer such dispute to the Executive Officers (or their designees) for attempted resolution by good faith negotiations within [***] days after such notice is received, including at least one (1) in person meeting of the Executive Officers within [***] days after such notice referring the dispute to the Executive Officers is received.

- 13.3. Binding Arbitration.** If the Executive Officers of the parties are not able to resolve such disputed matter within [***] days and either party wishes to pursue the matter, each such dispute, controversy or claim, subject to Section 13.4, shall be finally resolved by binding arbitration administered by the International Chamber of Commerce (“**ICC**”) pursuant to its Dispute Resolution Rules then in effect, and judgment on the arbitration award may be entered in any court having jurisdiction thereof. The parties agree that:
- 13.3.1.** The arbitration shall be conducted by a panel of three (3) persons experienced in the pharmaceutical business. Within [***] days after initiation of arbitration, each party shall select one (1) person to act as arbitrator and the two (2) party-selected arbitrators shall select a third arbitrator within [***] days of their appointment. If the arbitrators selected by the Parties are unable or fail to agree upon the third arbitrator, the third arbitrator shall be appointed by the ICC. The place of arbitration shall be New York, New York, and all proceedings and communications shall be in English.
- 13.3.2.** Either party may apply to the arbitrators for interim injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Either party also may, without waiving any remedy under this Agreement, seek from any court having jurisdiction any injunctive or provisional relief necessary to protect the rights or property of that party pending the arbitration award. The arbitrators shall have no authority to award punitive or any other type of damages not measured by a party’s compensatory damage. Each party shall bear its own costs and expenses and attorneys’ fees and an equal share of the arbitrators’ fees and any administrative fees of arbitration, unless the arbitrators determine that a party has incurred unreasonable expense due to vexatious or bad faith position taken by the other party, in whichever event, the arbitrators may make an award of all or any portion of such expenses so incurred.
- 13.3.3.** Reasons for the arbitrators’ decisions should be complete and explicit, including reasonable determinations of law and fact. The written reasons should also include the basis for any damages awarded and a statement of how the damages were calculated. Such a written decision shall be rendered by the arbitrators following a full comprehensive hearing, no later than [***] months following the selection of the arbitrators under Section 13.3.1
- 13.3.4.** Except to the extent necessary to confirm an award or as may be required by applicable Laws, neither Party nor any arbitrator may disclose the existence, content, or results of an arbitration without the prior written consent of both parties. In no event shall an arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the dispute, controversy or claim would be barred by the applicable statute of limitations.

- 13.4. **Excluded Disputes.** Notwithstanding Section 13.3, any dispute, controversy or claim relating to (a) the scope, validity, enforceability or infringement of any Patent, trademark or copyright or (b) any antitrust, anti-monopoly or competition law or regulation, whether or not statutory shall be submitted to a court of competent jurisdiction.

14. **GENERAL PROVISIONS**

- 14.1. **No Implied Licenses.** No right or license is granted under this Agreement by either party to the other, either expressly or by implication, except those specifically set forth herein.
- 14.2. **Independent Contractor Relationship.** Manufacturer's relationship with Artiva will be that of an independent contractor, and nothing in this Agreement should be construed to create a partnership, joint venture, or employer-employee relationship. Manufacturer is not an agent of Artiva and is not authorized to make any representation, contract, or commitment on behalf of Artiva.
- 14.3. **Use of Names.** Neither party shall use the other party's name or the names of the other party's employees in any advertising, sales or promotional material or in any publication without prior written permission of the other party.
- 14.4. **Governing Law.** Resolution of all disputes, controversies or claims arising out of, relating to or in connection with this Agreement or the performance, enforcement, breach or termination of this Agreement and any remedies relating thereto, shall be governed by and construed under the substantive laws of the Republic of Korea, without regard to conflicts of law rules. The UN Convention on Contracts for the International Sale of Goods will not apply to this Agreement.
- 14.5. **Entire Agreement; Modification.** This Agreement (including any Exhibit(s) hereto) and the Quality Agreement is both a final expression of the parties' agreement and a complete and exclusive statement with respect to all of its terms. This Agreement and the Quality Agreement supersedes all prior and contemporaneous agreements and communications, whether oral, written or otherwise, concerning any and all matters contained herein. This Agreement may only be modified or supplemented in a writing expressly stated for such purpose and signed by an authorized representative of each party.
- 14.6. **Non-Waiver.** The failure of a party to insist upon strict performance of any provision of this Agreement or to exercise any right arising out of this Agreement shall neither impair that provision or right nor constitute a waiver of that provision or right, in whole or in part, in that instance or in any other instance. Any waiver by a party of a particular provision or right shall be in writing, shall be as to a particular matter and, if applicable, for a particular period of time and shall be signed by an authorized representative of such party.

- 14.7. Assignment.** Except as expressly provided hereunder, neither this Agreement nor any rights or obligations hereunder may be assigned or otherwise transferred by either party without the prior written consent of the other party (which consent shall not be unreasonably withheld); *provided, however*, that Artiva may assign this Agreement and its rights and obligations hereunder without Manufacturer's consent in connection with the transfer or sale of all or substantially all of Artiva's business to which this Agreement relates to an affiliate or third party, whether by merger, sale of stock, sale of assets or otherwise. Except as expressly provided herein, Manufacturer may not subcontract or otherwise delegate its obligations under this Agreement without Artiva's prior written consent. The rights and obligations of the parties under this Agreement shall be binding upon and inure to the benefit of the successors and permitted assigns of the parties, and the name of a party appearing herein will be deemed to include the name of such party's successors and permitted assigns to the extent necessary to carry out the intent of this section. Any assignment not in accordance with this Agreement shall be void.
- 14.8. No Third-Party Beneficiaries.** This Agreement is neither expressly nor impliedly made for the benefit of any party other than those executing it.
- 14.9. Severability.** It; for any reason, any part of this Agreement is adjudicated invalid, unenforceable or illegal by a court of competent jurisdiction, then such adjudication shall not, to the extent feasible, affect or impair, in whole or in part, the validity, enforceability or legality of any remaining portions of this Agreement. All remaining portions shall remain in full force and effect as if the original Agreement had been executed without the invalidated, unenforceable or illegal part.

15. Notices

Any notice to be given under this Agreement must be in writing and delivered either in person, by any method of mail (postage prepaid) requiring return receipt, or by overnight courier or facsimile confirmed thereafter by any of the foregoing, to the party to be notified at its address given below, or at any address such party has previously designated by prior written notice to the other. Notice shall be deemed sufficiently given for all purposes upon the earliest of: (a) if delivered in person, the date of actual receipt; (b) if mailed, five (5) days after the date of postmark; (c) if delivered by overnight courier, the next business day the overnight courier regularly makes deliveries; or (d) if delivered by facsimile during the business hours, on the date of delivery shown on the transmission confirmation slip which is to be sent by mail.

If to Artiva, notices must be addressed to:

Artiva Biotherapeutics, Inc.
4747 Executive Drive, Suite 1150
San Diego, CA 92121
Attention: Chief Executive Officer

With copies (which shall not constitute notice) to:

Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121-1909
Attention: L. Kay Chandler
FAX: +1 858 550 6420

If to Manufacturer, notices must be addressed to:

Green Cross Cell Corporation
107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si,
Gyeonggi-do, 446-850, 16924, Republic of South Korea.
Attention: Deputy General Manager ([***)

In the event of a change of notice address, recipient or both, a party shall provide the other party written notice pursuant to this Section 15 setting forth the new address and/or recipient, as appropriate.

16. **Force Majeure**

Each party shall be excused from liability for the failure or delay in performance of any obligation under this Agreement by reason of any event beyond such party's reasonable control including but not limited to Acts of God, fire, flood, explosion, earthquake, or other natural forces, war, civil unrest, acts of terrorism, accident, destruction or other casualty, any lack or failure of transportation facilities, any lack or failure of supply of raw materials, any strike or labor disturbance, or any other event similar to those enumerated above. Such excuse from liability shall be effective only to the extent and duration of the event(s) causing the failure or delay in performance and provided that the party has not caused such event(s) to occur. Notice of a party's failure or delay in performance due to force majeure must be given to the other party within [***] business days after its occurrence. All delivery dates under this Agreement that have been affected by force majeure shall be tolled for the duration of such force majeure. In no event shall any party be required to prevent or settle any labor disturbance or dispute.

17. **Interpretation.** The headings of clauses contained in this Agreement preceding the text of the sections, subsections and paragraphs hereof are inserted solely for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction. All references in this Agreement to the singular shall include the plural where applicable, and all references to gender shall include both genders and the neuter. Unless otherwise specified, references in this Agreement to any section shall include all subsections and paragraphs in such Section and references in this Agreement to any subsection shall include all paragraphs in such subsection. All references to days in this Agreement shall mean calendar days, unless otherwise specified. Ambiguities and uncertainties in this Agreement, if any, shall not be interpreted against either party, irrespective of which party may be deemed to have caused the ambiguity or uncertainty to exist. This Agreement has been prepared in the English language, and the English language shall control its interpretation. In addition, all notices required or permitted to be given hereunder, and all written, electronic, oral or other communications between the parties regarding this Agreement, shall be in the English language.

18. **Counterparts**

This Agreement may be executed in counterparts, each of which shall be deemed an original document, and all of which, together with this writing, shall be deemed one instrument.



IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement for Manufacturing Services on the Effective Date.

ARTIVA BIOTHERAPEUTICS, INC.

GREEN CROSS CELL CORPORATION

By: /s/ Thomas Farrell
Title: President & CEO
Date: March 16, 2020

By: /s/ Duck Joo Lee
Title: Duck Joo Lee CEO
Date: March 16, 2020



Exhibit A

Work Order 1

[Page 26 of 27]



Exhibit B

Quality Agreement

[Page 27 of 27]

Amendment No. 1 to Master Agreement for Manufacturing Services

This Amendment No. 1 (this “Amendment”), effective as of June 16, 2020, amends certain provisions of the Master Agreement for Manufacturing Services dated March 16, 2020, between Artiva Biotherapeutics, Inc. (“Company”), having its principal place of business at 4747 Executive Drive, Suite 1150, San Diego, CA 92121 and Green Cross Cell Corporation, a Korean corporation (“Manufacturer”), with its principal place of business located at 107, lhyeon-ro 30 beon-gil, Giheung- gu, Yongin-si, Gyeonggi-do, 16924, Republic of South Korea (hereinafter the “Original Agreement”).

WHEREAS, Artiva and Manufacturer find it in their respective interests to amend the provisions of the Original Agreement as set forth below.

NOW THEREFORE, for consideration duly given, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree to the following:

1. Except as expressly amended hereby, the Original Agreement shall continue to remain in full force and effect in accordance with its terms.
2. **Section 10.2** of the Original Agreement is hereby deleted in its entirety and replaced with the following:

“**Termination of Agreement At Will.** Artiva may terminate this Agreement at any time without cause upon six (6) months’ prior written notice to Manufacturer. Artiva may terminate any Work Order at any time without cause upon sixty (60) days’ prior written notice to Manufacturer.”
3. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which shall constitute together the same document. The Parties agree that signatures transmitted by electronic means (e.g. facsimile or a scanned version of the executed agreement in PDF format attached to an e-mail) shall bind the Parties. This Amendment is otherwise governed by the terms and conditions of the Original Agreement, except as amended hereby.

IN WITNESS WHEREOF, each of the undersigned parties have had this Amendment executed by its duly authorized representatives.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Thomas J. Farrell

Printed Name: Thomas J. Farrell

Title: President & CEO

MANUFACTURER

By: /s/ Duckjoo Lee

Printed Name: Duckjoo Lee

Title: CEO

Amendment No. 1 — Master Agreement for Manufacturing Services

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [***], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.

MASTER RESEARCH SERVICES AGREEMENT

(For Selected Products)

THIS MASTER RESEARCH SERVICES AGREEMENT (the “*Agreement*”) is made as of August 3, 2020 (the “*Effective Date*”), by and between ARTIVA BIOTHERAPEUTICS, INC., a Delaware corporation, having an address of 4747 Executive Drive, Suite 1150, San Diego, CA 92121 (“*Artiva*”), and GREEN CROSS LABCELL CORPORATION, a Korean corporation, with its principal place of business at 107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 446-850, 16924, Republic of Korea (“*GCLC*”).

RECITALS

WHEREAS, Artiva and GCLC are parties to that certain Option and License Agreement dated September 4, 2019, as amended on June 23, 2020 (the “*Master Agreement*”), and Artiva is engaged in the research and development of pharmaceutical products, including Exercised Selected Products (as defined in the Master Agreement) for which it has entered into Selected Product License Agreements (as defined in the Master Agreement) as provided for by the Master Agreement;

WHEREAS, the Master Agreement provides that Artiva has the right to engage GCLC to provide mutually agreed research services and manufacturing services for Exercised Selected Products pursuant to one or more written service agreements separately entered into between Artiva and GCLC;

WHEREAS, GCLC has personnel, expertise and facilities suitable for performing clinical and non-clinical research and development services on behalf of third parties;

WHEREAS, Artiva desires to engage GCLC to provide mutually agreed research services in support of the research and development of one or more of the Exercised Selected Products that it has licensed from GCLC under one or more Selected Product License Agreements, which services are outside of the R&D Program (as defined in the Master Agreement) but would be overseen by the JSC or JDC (as defined in the Master Agreement), as applicable, in accordance with the responsibilities and authority of the JSC and JDC set forth in the Master Agreement; and

WHEREAS, Artiva and GCLC desire to enter into this Agreement to govern the relationship between the parties and to define the conditions under which Artiva may engage GCLC for the services described above.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and premises contained in this Agreement, the receipt and sufficiency of which are hereby expressly acknowledged, the parties hereto agree as follows:

1. DEFINITIONS.

1.1 “Affiliate” means, with respect to a particular party, a person, corporation, partnership, or other entity that controls, is controlled by or is under common control with such party. For the purposes of the definition in this Section 1.1, the word “**control**” (including, with correlative meaning, the terms “**controlled by**” or “**under the common control with**”) means the actual power, either directly or indirectly through one or more intermediaries, to direct or cause the direction of the management and policies of such entity, whether by the ownership of at least fifty percent (50%) of the voting stock of such entity, or by contract or otherwise.

1.2 “Arbitrators” shall have the meaning set forth in Section 10.5.

1.3 “Arising Intellectual Property” shall have the meaning set forth in Section 5.2.

1.4 “Artiva Selected Product” shall mean a particular Artiva drug candidate that is an Exercised Selected Product under a Selected Product License Agreement as set forth in the Master Agreement, for which GCLC has agreed to conduct a Project, as identified with particularity in the applicable Work Order.

1.5 “C.F.R.” shall mean the Code of Federal Regulations, as amended.

1.6 “Claim” shall have the meaning set forth in Section 10.5.

1.7 “Confidential Information” shall have the meaning set forth in Section 6.1.

1.8 “GCLC Technology” shall have the meaning set forth in Section 5.3.

1.9 “ICDR” shall have the meaning set forth in Section 10.5.

1.10 “Materials” shall have the meaning set forth in Section 2.6.

1.11 “Project” shall have the meaning set forth in Section 2.2.

1.12 “Protocol” shall mean a written protocol, proposed by Artiva and approved in writing by GCLC, detailing the instructions for conducting a particular Project (or portion thereof). Each Protocol shall be attached to the applicable Work Order and incorporated therein. A Protocol may only be amended upon mutual agreement of the parties, which such amendment shall be attached to the original Protocol and incorporated therein.

1.13 “Regulatory Authority” shall mean any U.S. or foreign regulatory or governmental authority, such as the U.S. Food and Drug Administration, the European Medicines Agency, or any successor agency thereto.

1.14 “Results” shall have the meaning set forth in Section 2.5.

1.15 “Rules” shall have the meaning set forth in Section 10.5.

1.16 “Services” shall mean the particular tasks to be performed by GCLC for a given Project pursuant to this Agreement, as more fully set forth in the applicable Work Order.

1.17 “U.S.C.” shall mean the United States Code, as amended.

1.18 “Work Order” shall mean that document for a given Project under which GCLC agrees to perform Services for such Project pursuant to this Agreement, as more fully described in Section 2.2.

1.19 “Work Product” shall mean any and all results (including Results) and products (interim and/or final) of the Services performed by GCLC, whether tangible or intangible, including, without limitation, each and every invention, discovery, design, drawing, protocol, process, technique, formula, trade secret, device, compound, substance, material, pharmaceutical, method, software program (including, without limitation, object code, source code, flow charts, algorithms and related documentation), listing, routine, manual and specification, whether or not patentable or copyrightable, that are made, developed, perfected, designed, conceived or first reduced to practice by GCLC, either solely or jointly with others, in the course and as a result of performing the Services; but excluding GCLC Background Technology.

2. SCOPE OF WORK.

2.1 Scope of Agreement. As a master form of contract, this Agreement allows the parties to contract for multiple Projects through the issuance of multiple Work Orders (as discussed in Section 2.2 below), without having to re-negotiate the basic terms and conditions contained herein.

2.2 Performance of Services. The specific research or development activities to be performed, or other services to be provided, by GCLC for each project under this Agreement (each, a **“Project”**) shall be separately specified in writing on terms and in a form acceptable to the parties (each such writing, a **“Work Order”**). Each Work Order shall become effective only upon signature by both parties. Each Work Order shall set forth, upon terms mutually agreeable to the parties, the specific Services to be performed by GCLC, the timeline and schedule for the performance of such Services, and the compensation to be paid by Artiva to GCLC for the provision of such Services, as well as any other relevant terms and conditions. Any Protocol applicable to a particular Project shall be attached to, and is hereby incorporated by reference in, the corresponding Work Order. If a Project includes the development of specific Work Product, the specifications of such Work Product shall be set forth in the relevant Work Order. If a Project involves a clinical trial or any other study the results of which are expected or intended to be submitted to any Regulatory Authority, the relevant Work Order shall specify: (a) any particular laws, rules, regulations, guidelines and standards (*e.g.*, current good laboratory practices and/or good clinical practices) of any Regulatory Authority or other body that GCLC agrees to comply with in performing such Project; and (b) any obligations of Artiva, as the sponsor of IND application and otherwise, pursuant to 21 C.F.R. § 312.50 or other applicable laws, rules and regulations in connection with such Project that GCLC agreed to assume from Artiva. There shall be no minimum or maximum number of Work Orders to be entered into under this Agreement. Each Work Order shall be subject to acceptance by GCLC and all of the terms and conditions of this Agreement, in addition to the specific details set forth in the Work Order. To the extent any terms or provisions of a Work Order conflict with the terms and provisions of this Agreement, the terms and provisions of this Agreement shall control, except to the extent such Work Order specifically states the parties’ intent that such Work Order control with respect to a particular matter. Any changes to a Work Order shall be in writing, executed by each party, attached to the original Work Order and incorporated therein.

2.3 Compliance with Work Orders and Law. GCLC agrees to perform the Services set forth in each Work Order in a competent and professional manner and in strict accordance with the terms and conditions contained in this Agreement, the applicable Protocol(s) and such Work Order. Both parties hereto shall perform the obligations set forth herein in conformance with all applicable laws, rules and regulations, including, if applicable, current good laboratory practices and/or current good clinical practices. If government regulatory requirements applicable to any Work Order are changed, then Artiva shall notify GCLC of all such changed requirements, and GCLC shall comply with the new requirements. If compliance with new regulatory requirements necessitates a change in a Work Order, Artiva shall amend the Work Order and obtain GCLC's written consent to such change prior to implementation.

2.4 Subcontractors. Save for subcontracting to its Affiliates, GCLC may not subcontract any of the Services under a Work Order without Artiva's prior written consent, except to the extent expressly permitted by such Work Order. GCLC shall at all times be responsible for the compliance of its permitted subcontractors with the terms and conditions of this Agreement.

2.5 Results. GCLC shall solely own all data generated by GCLC or its employees, agents, consultants, Artiva-approved subcontractors or other representatives in the course of conducting a Project, whether in written, graphic or electronic form or contained in any computer database or in any computer readable form (collectively, the **"Results"**). GCLC hereby confirms that such Results that fall within the definition of GCLC Core Technology or Selected Product Technology (each as defined in the Master Agreement) are included in the licenses granted to Artiva under the Master Agreement and the applicable Selected Product License Agreement, respectively. GCLC shall record, or cause to be recorded, all Results in a timely, accurate and complete manner. Copies of all Results collected shall be delivered to Artiva by GCLC in a timely manner throughout the performance of the Project and in accordance with the applicable Work Order. Subject to Section 9.6 of the Master Agreement, GCLC shall have the right to review, publish, disclose and use any Results as GCLC, in its sole discretion, deems appropriate, including, without limitation, in submission to a Regulatory Authority. Any copyrightable work created in connection with the performance of a Project and contained in or relating to the Results will not be considered a work made for hire, whether published or unpublished, and all rights therein shall be the property of GCLC as author and owner of copyright in such work. For purposes of clarification, this section shall apply to each Project individually.

2.6 Materials. Artiva shall provide, at no cost to GCLC, the applicable materials necessary for performance of a Project as specified in the applicable Work Order, which may include, without limitation, Artiva Selected Product (collectively, **"Materials"**), in amounts sufficient for the conduct of the Project. All such Materials shall remain the sole property of Artiva. GCLC shall use the Materials solely in furtherance of the Services in accordance with this Agreement and Work Orders, shall not deliver the Materials to, or use the Materials for the benefit of, any third party without the prior written consent of Artiva, and shall use the Materials in compliance with all applicable laws, rules and regulations. The Materials supplied under this Agreement must be used with prudence and appropriate caution in any experimental work because not all of their characteristics may be known. Except as expressly set forth herein, INCLUDING

SECTION 9.1 HEREOF, THE MATERIALS ARE PROVIDED "AS IS" AND WITHOUT ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY WARRANTY THAT THE USE OF THE MATERIALS WILL NOT INFRINGE OR VIOLATE ANY PATENT OR OTHER PROPRIETARY RIGHTS OF ANY THIRD PARTY.

3. PAYMENT AND BUDGET.

3.1 Estimated Budget; Accounting. Except to the extent a Work Order provides for GCLC to perform Services on a fixed-fee basis, each Work Order shall contain an estimated budget for the performance of the Work Order, as well as additional terms and conditions relating to such estimated budget, and GCLC shall provide to Artiva, at intervals stated in each Work Order, an accounting of costs incurred and accrued to date for Services under the applicable Project.

3.2 Invoices; Payment. Unless otherwise agreed by the parties in writing, GCLC shall provide to Artiva for each Work Order one or more separate invoices (to be delivered at intervals specified in such Work Order), such invoice summarizing the Services performed during that period of time under that Work Order and the costs therefor. Artiva shall pay each invoice within [***] days of receipt thereof, in accordance with the applicable schedule of payments specified in such Work Order. Artiva shall not be obligated to pay any amounts in excess of the budget or other payments specified in a Work Order that have not been approved in writing by Artiva in advance.

3.3 Records Audit. Except to the extent a Work Order provides for GCLC to perform Services on a fixed-fee basis, Artiva and/or an independent accounting firm appointed by Artiva, at Artiva's sole expense, shall have the right to audit GCLC's financial records relating exclusively to expenses incurred by GCLC for a Project during the time such Project is ongoing under this Agreement and for [***] years thereafter; *provided*, that any such audit(s) shall be conducted upon reasonable advance notice to GCLC and during GCLC's normal business hours.

4. REGULATORY.

4.1 Regulatory Inspections. If any Regulatory Authority conducts, or gives notice to GCLC of its intent to conduct, an inspection at GCLC's facilities where any Project or Services are being performed or to take any other regulatory action with respect to any Project or Services, then except to the extent prohibited by law or otherwise impracticable, GCLC shall use best efforts to notify Artiva in writing prior to complying with such demand or request, and Artiva shall have the right to be present at any such inspections and shall have the opportunity to provide, review, and comment on any responses that may be required. GCLC shall promptly provide Artiva with a copy of the results from any regulatory inspection. Artiva shall bear any costs, fees, penalties and other imposts levied by any Regulatory Authority, if any, as a result of [***], in each case other than [***].

4.2 Site Visits by Artiva. Artiva or Artiva's representatives may visit and/or meet with GCLC or Artiva-approved subcontractors at reasonable times and with reasonable frequency during normal business hours to observe the progress of the Project and review relevant records. GCLC shall assist Artiva in scheduling such visits.

4.3 Record-Keeping. GCLC shall maintain records of documents, information, data and materials used or generated in performance of the Services (including, without limitation, Work Product and Arising Intellectual Property) in a professional manner so as to permit Artiva to review such records pertinent to the Project in accordance with this Section 4.3 without disclosing to Artiva any third party confidential or proprietary information or other information of GCLC unrelated to the Project. Designated representatives of Artiva shall, upon reasonable notice to GCLC, have access to and shall be permitted to review all such records during the term of this Agreement and during the applicable retention period specified in Section 4.4. Upon Artiva's reasonable request, GCLC shall provide to Artiva a copy of any or all such records.

4.4 Retention of Records. Notwithstanding the provisions of Article 6, GCLC may retain in its possession copies of any and all data, documents or information related to the performance of this Agreement, in addition to as required for regulatory, legal or insurance purposes. Except as expressly set forth in any Work Order(s), GCLC shall maintain records relating to the Services under any Work Order until the later of: (i) the [***] anniversary of completion of such Services; and (ii) expiration of the minimum retention period required by applicable laws, rules and regulations.

5. OWNERSHIP OF INTELLECTUAL PROPERTY.

5.1 Rights under Master Agreement and Selected Product License Agreements. Each party understands and agrees that this Agreement does not modify the ownership or rights of GCLC, nor the rights granted to Artiva, with respect to the GCLC Core Technology and Selected Product Technology (each as defined in the Master Agreement) as established pursuant to the Master Agreement and the Selected Product License Agreements. Moreover, each party understands and agrees that this Agreement does not modify the ownership or rights of GCLC, nor the rights granted to Artiva, with respect to the technology invented, conceived or developed by GCLC based on GCLC Core Technology and Selected Product Technology.

5.2 Work Product. Unless otherwise agreed by the parties in a Work Order, all right, title and interest in and to Work Product generated in the performance of work conducted under this Agreement by GCLC's employees, agents, consultants, subcontractors or other representatives, either solely or jointly with employees, agents, consultants or other representatives of Artiva, including all patent and other intellectual property rights therein (the "***Arising Intellectual Property***"), shall be owned solely by GCLC. GCLC hereby confirms that such Arising Intellectual Property (including, without limitation, Work Product and Results) that fall within the definition of GCLC Core Technology or Selected Product Technology are included in the licenses granted to Artiva under the Master Agreement and the applicable Selected Product License Agreement, respectively. Upon request of GCLC, Artiva and all employees, agents, consultants

and subcontractors of Artiva shall sign and deliver to GCLC all writings and do all such things as may be necessary or appropriate to vest in GCLC all right, title and interest in and to such Work Product and Arising Intellectual Property. Unless provided otherwise in the Master Agreement or the applicable Selected Product License Agreement, GCLC may, in its sole discretion, file and prosecute in its own name and at its own expense, patent applications on any patentable inventions within the Work Product. Upon the request of GCLC, and at GCLC's expense, Artiva shall assist GCLC in the preparation, filing and prosecution of such patent applications and shall execute and deliver any and all instruments necessary to effectuate the ownership of such patent applications and to enable GCLC to file and prosecute such patent applications in any country.

5.3 GCLC Technology. Notwithstanding anything to the contrary contained in this Agreement or any Work Order, Work Product shall exclude (a) any GCLC proprietary technology existing prior to the Effective Date or that is developed or acquired by GCLC independent of the Services performed pursuant to this Agreement ("**GCLC Background Technology**") and (b) any modifications, enhancements or improvements to GCLC Background Technology that are developed solely by GCLC in the course of performing the Services, are generally applicable to GCLC's business and not specific to any Artiva Selected Product, and do not use or incorporate any Confidential Information of Artiva ("**GCLC Improvements**") and, collectively with GCLC Background Technology, "**GCLC Technology**", and, as between the parties, all GCLC Technology shall be and remain the sole and exclusive property of GCLC.

6. CONFIDENTIALITY.

6.1 Confidential Information. For purpose of this Agreement, "**Confidential Information**" shall mean any and all information disclosed or made available by or on behalf of a party (the "**Disclosing Party**") to the other party (the "**Receiving Party**"), whether in oral, written, graphic, electronic or other form. However, notwithstanding the foregoing, all Results, other Work Product and Arising Intellectual Property shall be deemed Confidential Information of both parties hereunder and under the Master Agreement.

6.2 Exceptions. Confidential Information of a Disclosing Party shall not include any information that the Receiving Party can demonstrate by competent evidence: (a) is or becomes publicly known other than as a result of any breach of this Agreement by the Receiving Party; (b) is disclosed to the Receiving Party on a non-confidential basis by a third party who rightfully possesses the information; (c) was known to the Receiving Party prior to its first receipt from the Disclosing Party (provided that the exception set forth in this clause (c) shall not apply to Results, other Work Product or Arising Intellectual Property); or (d) was independently developed by the Receiving Party outside the scope of this Agreement and without use of or reference to the Confidential Information of the Disclosing Party.

6.3 Confidentiality Obligation. During the term of this Agreement and for a period of [***] years thereafter, the Receiving Party shall maintain all Confidential Information of the Disclosing Party as confidential and shall not disclose any such Confidential Information or use any such Confidential Information for any purpose, except (a) as expressly authorized by this Agreement, (b) as permitted by Section 6.4, or (c) to its employees, agents, consultants, Artiva- approved subcontractors and other representatives who require access to such information to accomplish the purposes of this Agreement so long as such persons are under obligations regarding

the confidentiality of the Confidential Information and the ownership of Work Product and Arising Intellectual Property that are consistent with, and no less protective to Artiva than, the terms of this Agreement. The Receiving Party may use the Confidential Information of the Disclosing Party only to the extent required to accomplish the purposes of this Agreement. The Receiving Party shall use at least the same standard of care as it uses to protect its own confidential information to ensure that its employees, agents, consultants, Artiva-approved subcontractors and other representatives do not disclose or make any unauthorized use of the Confidential Information. The Receiving Party shall promptly notify the Disclosing Party upon discovery of any unauthorized use or disclosure of the Confidential Information.

6.4 Authorized Disclosure. Notwithstanding the provisions of Section 6.3, the Receiving Party may disclose Confidential Information of the Disclosing Party, without violating its obligations under this Agreement, to the extent the disclosure is required by applicable law or by a valid order of a court or other governmental body having jurisdiction, provided that the Receiving Party gives reasonable prior written notice to the Disclosing Party of such required disclosure and, at the Disclosing Party's request and expense, cooperates with the Disclosing Party's efforts to contest such requirement, to obtain a protective order requiring that the Confidential Information so disclosed be used only for the purposes for which the order was issued or the law or regulation required, and/or to obtain other confidential treatment of the Confidential Information so disclosed.

6.5 Third Party Confidential Information. The Disclosing Party shall not disclose to the Receiving Party any confidential or proprietary information that belongs to any third party.

7. REPRESENTATIONS AND WARRANTIES.

7.1 Mutual Representations and Warranties. Each party represents and warrants that (a) it has full power and authority to enter into this Agreement, (b) this Agreement has been duly authorized, (c) this Agreement is binding upon it, (d) the terms of this Agreement are not inconsistent with its other contractual arrangements, and (e) it is not constrained by any existing agreement in providing complete disclosures to the other party concerning obligations to be performed under this Agreement.

7.2 GCLC Representations and Warranties. GCLC represents and warrants that: (a) GCLC will render the Services in accordance with high professional standards customary to its industry and in compliance with the terms of this Agreement, the terms of the Work Orders, and all applicable laws, rules and regulations; and (b) the personnel assigned to perform Services rendered under this Agreement shall be qualified and professionally capable of performing the Services. GCLC further represents and warrants that, as of the Effective Date, there are no pending warnings (*i.e.*, warnings to which GCLC has not responded) issued to GCLC by any Regulatory Authority relating to services it has provided to third parties relating to any clinical trial.

7.3 No Debarment. The mutual covenant in Section 11.3(a) of the Master Agreement is incorporated by reference herein and deemed to also apply with respect to the performance of the Services by GCLC and the use of the Work Product and Arising Intellectual Property by Artiva.

7.4 Anti-Bribery. Each party represents, warrants and covenants that it and its officers, employees, directors, consultants, contracts and agents, in connection with the performance of its respective obligations under this Agreement, shall not cause the other party to be in violation of any applicable anti-bribery legislations anywhere in the world.

7.5 Disclaimer of Warranties. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATION OR WARRANTY TO THE OTHER PARTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF TITLE, NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

7.6 Limitation of Liability. EXCEPT FOR BREACH OF ARTICLE 6, IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER FOR ANY LOST PROFITS, LOST SAVINGS, OR ANY OTHER INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES, EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT; *provided, however,* that this Section 7.6 shall not be construed to limit either party's indemnification obligations under Article 9.

8. TERM AND TERMINATION.

8.1 Term. The term of this Agreement shall commence on the Effective Date and, unless earlier terminated in accordance with this Article 8, shall expire on the fifth (5th) anniversary of the Effective Date, except that if Services under any Work Order are in progress on the fifth (5th) anniversary of the Effective Date, such Work Order shall continue to be governed by the terms of this Agreement, which terms shall remain in effect beyond the expiration of this Agreement solely with respect to such Work Order until completion of such Services or the earlier termination of such Work Order.

8.2 Termination of Agreement for Material Breach. A party may terminate this Agreement or any Work Order for material breach of this Agreement by the other party upon 30 days' written notice specifying the nature of the breach, unless the breaching party cures such material breach prior to the expiration of such 30-day period. If such notice of breach is for breach of a Work Order, such notice shall note the specific Work Order under which such breach is claimed.

8.3 Termination of Agreement At Will. Artiva may terminate this Agreement or any Work Order without cause upon 90 days' prior written notice to GCLC. Either party may terminate this Agreement immediately upon written notice to the other party if the other party is in breach of Section 7.3. In addition, GCLC may terminate this Agreement without cause upon 90 days' prior written notice to Artiva. Notwithstanding the foregoing, if Services under any Work Order are in progress on the date on which GCLC gives notice under this Section 8.3, then, at Artiva's option, termination under this Section 8.3 shall not be effective until the later of (a) the end of the 90 day notice period set forth in the preceding sentence, or (b) the date on which the Services provided under the Work Order have been completed.

8.4 Consequences of Termination. In the event of early termination of any individual Work Order for a Project, or in the event of termination of this Agreement and all Work Orders for all Projects for whatever reason, Artiva shall pay to GCLC all sums owing to GCLC for Services completed up to the effective termination date of such Work Order(s) and all non-cancelable obligations reasonably incurred before the effective date of termination pursuant to such Work Order(s) within 30 days after the effective date of termination. Subject to the preceding sentence, GCLC shall refund to Artiva any prepaid amounts not earned by GCLC prior to the date of such termination, save in the case of termination of this Agreement by Artiva at will under Section 8.3 above, in which event, the parties shall mutually discuss in good faith any compensation and costs payable to GCLC for [***].

8.5 Survival. Expiration or termination of this Agreement shall not relieve the parties of any obligation accruing prior to such expiration or termination. Sections 2.5, 2.6, 3.3, 4.1, 4.3, 4.4, 7.5, 7.6, 8.4 and 8.5 and Articles 5, 6 and 9 shall survive expiration or termination of this Agreement.

9. INDEMNIFICATION.

9.1 Artiva Indemnification. Artiva hereby agrees to save, defend, indemnify and hold harmless GCLC and its officers, directors, employees, consultants and agents ("**GCLC Indemnitees**") from and against any and all losses, damages, liabilities, expenses and costs, including reasonable legal expense and attorneys' fees ("**Losses**"), to which any such GCLC Indemnitee may become subject as a result of any suit, claim, demand, action or other proceeding by any third party (in each case, a "**Third Party Claim**"), to the extent such Losses arise out of: (a) the material breach by Artiva of any representation, warranty, covenant or agreement made by it under this Agreement; (b) the gross negligence or willful misconduct of any Artiva Indemnitee (as defined below); (c) the development, manufacture, use, handling, storage, sale or other disposition of any Artiva Selected Product or the exploitation of Work Product by or on behalf of Artiva or (d) the use of Materials by GCLC in connection with the Services in accordance with the Protocol and Artiva's instructions, or with respect to any deficiency or defect in Materials; except, in each case, to the extent such Losses result from the material breach by GCLC of any representation, warranty, covenant or agreement made by it under this Agreement or the negligence or willful misconduct of any GCLC Indemnitee.

9.2 GCLC Indemnification. GCLC hereby agrees to save, defend, indemnify and hold harmless Artiva and its officers, directors, employees, consultants, contractors and agents ("**Artiva Indemnitees**") from and against any and all Losses to which any such Artiva Indemnitee may become subject as a result of any Third Party Claim to the extent such Losses arise out of the material breach by GCLC of any representation, warranty, covenant or agreement made by it under this Agreement or the gross negligence or willful misconduct of any GCLC Indemnitee; except, in each case, to the extent such Losses result from the material breach by Artiva of any representation, warranty, covenant or agreement made by it under this Agreement or the gross negligence or willful misconduct of any Artiva Indemnitee.

9.3 Indemnification Procedures. A party claiming indemnification under this Article 9 (the “*Indemnitee*”) shall promptly notify the other party (the “*Indemnitor*”) in writing of any action, claim or other matter in respect of which the Indemnitee or any of its directors, officers, employees and agents intend to claim such indemnification; *provided, however*, the failure to provide such notice within a reasonable period of time shall not relieve the Indemnitor of any of its obligations hereunder except to the extent the Indemnitor is materially prejudiced by such failure. The Indemnitor shall not enter into any settlement that would adversely affect the Indemnitee’s rights hereunder or impose any obligations on the Indemnitee in addition to those set forth herein without the Indemnitee’s prior written consent. The Indemnitee may not settle any Third Party Claim without the prior written consent of the Indemnitor, which shall not be unreasonably withheld, conditioned, or delayed. The Indemnitee and its directors, officers, employees and agents shall cooperate fully with the Indemnitor and its legal representatives in the investigation and defense of any action, claim or other matter covered by the indemnification obligations of this Section 9.3. The Indemnitee may participate in such defense by counsel of its own selection and at its own expense.

9.4 Conflict of Interest. Notwithstanding anything to the contrary contained in this Agreement, if a conflict of interest exists between the parties with respect to a Third Party Claim for which indemnification is sought by one or both parties, or if the assumption and conduct of the defense by the Indemnitor would adversely affect the Indemnitee in any manner or prejudice its ability to conduct a successful defense, then the Indemnitee may be separately represented with respect to such Third Party Claim by legal counsel reasonably acceptable to the Indemnitor and at the Indemnitor’s expense.

9.5 Insurance. GCLC, at its own expense, shall secure and maintain in full force and effect throughout the term of this Agreement insurance coverage for general, professional and contractual liability (including errors and omissions coverage) in commercially reasonable amounts in light of GCLC’s obligations hereunder with a reputable A-rated insurance company. In addition, GCLC shall secure and maintain in full force and effect throughout the term of this Agreement workers’ compensation insurance in the amount required by the laws of any country in which any of GCLC’s employees performing Services hereunder are located. GCLC shall provide a certificate of insurance evidencing the required coverage under this Section 9.5 to Artiva upon request. Notwithstanding, it is understood that such insurance shall not be construed to create a limit of Artiva’s liability with respect to its indemnification obligation under this Article 9 or any other liability to compensate GCLC under this Agreement.

10. GENERAL PROVISIONS.

10.1 No Implied Licenses. No right or license is granted under this Agreement by either party to the other, either expressly or by implication, except those specifically set forth herein.

10.2 Independent Contractor Relationship. GCLC’s relationship with Artiva is that of an independent contractor, and nothing in this Agreement should be construed to create a partnership, joint venture, or employer-employee relationship. Each party is not an agent of the other party and is not authorized to make any representation, contract, or commitment on behalf of such other party. Each party shall be responsible for all of its tax returns and payments required to be filed with or made to any national, state or local tax authority with respect to transaction contemplated under this Agreement.

10.3 Use of Names. Neither party shall use the other party's name or the names of the other party's employees in any advertising or sales promotional material or in any publication without prior written permission of the other party. However, in its use of the Work Products and/or Arising Intellectual Property with or towards any third party, Artiva shall clearly indicate that the ownership of any and all intellectual property rights thereof belongs to GCLC if and as required by the Master Agreement and/or Selected Product License Agreement.

10.4 Successors and Assigns. Neither party may assign this Agreement without the prior written consent of the other party; *provided, however*, that Artiva may assign this Agreement without GCLC's consent in connection with the transfer or sale of all or substantially all of the business of Artiva to which this Agreement relates, whether by merger, sale of stock, sale of assets or otherwise. Any attempted assignment of this Agreement not in compliance with this Section 10.4 shall be null and void. No assignment shall relieve either party of the performance of any accrued obligation that such party may then have under this Agreement. This Agreement shall inure to the benefit of and be binding upon each party signatory hereto, its successors and permitted assigns.

10.5 Dispute Resolution. The parties agree that any controversy or claim arising out of, relating to or in connection with any provision of this Agreement, if and when a dispute arises under this Agreement, that is not resolved by mutual written agreement of the parties (a "**Claim**"), shall, upon the written request of either party to the other party, be resolved by final and binding arbitration administered by the International Centre for Dispute Resolution ("**ICDR**") in accordance with the then-effective provisions of its International Arbitration Rules (the "**Rules**"), except to the extent any such Rule conflicts with the express provisions of this Section 10.5. Capitalized terms used but not otherwise defined in this Section 10.5 shall have the meanings provided in the Rules. The parties agree that:

(a) The arbitration shall be conducted by three (3) arbitrators (the "**Arbitrators**"), none of whom shall be a current or former employee or director, or a current stockholder, of either party or any of their respective Affiliates. Each party shall appoint one Arbitrator within [***] days after submission of the Answer to the Notice of Arbitration, and the two-party appointed shall appoint a third Arbitrator, who shall serve as chair of the tribunal, within [***] days after the appointment of the later-appointed Arbitrator. If any of the Arbitrators are not appointed within the time prescribed above, then the ICDR shall appoint the Arbitrator(s) in accordance with its International Arbitration Rules.

(b) The arbitration and all associated discovery proceedings and communications shall be conducted in English. The seat of the arbitration shall be Singapore. The Award rendered by the Arbitrators shall be final, binding and non appealable, and judgment may be entered upon it in any court of competent jurisdiction. The Arbitrators shall have no authority to award punitive or any other type of damages not measured by a party's compensatory damage. The Arbitrators will, in rendering their decision, apply the substantive law of the laws of the State of New York, U.S., excluding its conflicts of laws principles. Each party shall bear its own attorney's fees, costs, and disbursements arising out of the arbitration, and shall pay an equal share of the fees and costs of the Arbitrators.

(c) Notwithstanding the foregoing, nothing contained in this Agreement shall deny either party the right to seek injunctive or other equitable relief from a court of competent jurisdiction in the context of a bona fide emergency or prospective irreparable harm, and such an action may be filed and maintained notwithstanding any ongoing discussions between the parties or any ongoing arbitration proceeding. In addition, either party may apply to the Arbitrators for interim injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Except to the extent necessary to confirm an award or as may be required by applicable laws, neither party nor any Arbitrator may disclose the existence, content, or results of an arbitration without the prior written consent of both parties. In no event shall an arbitration be initiated after the date when commencement of a legal or equitable proceeding based on the dispute, controversy or claim would be barred by the applicable statute of limitations.

10.6 Governing Law. Resolution of all disputes, controversies or claims arising out of, relating to or in connection with this Agreement or the performance, enforcement, breach or termination of this Agreement and any remedies relating thereto, shall be governed by and construed under the substantive laws of the State of New York, U.S., without regard to conflicts of law rules.

10.7 Entire Agreement; Amendment. This Agreement, including its Exhibits (if any) and Work Orders, constitutes the final, complete and exclusive agreement of the parties with respect to the subject matter hereof and supersedes all prior understandings and agreements relating to its subject matter, except, for the avoidance of doubt, the Master Agreement and the Selected Product Agreements. This Agreement may not be changed, modified, amended or supplemented except by a written instrument signed by both parties.

10.8 Non-Waiver. No failure or delay of one of the parties to insist upon strict performance of any of its rights or powers under this Agreement shall operate as a waiver thereof, nor shall any other single or partial exercise of such right or power preclude any other further exercise of any rights or remedies provided by law. Any waiver by a party of a particular provision or right shall be in writing, shall be as to a particular matter and, if applicable, for a particular period of time and shall be executed by an authorized officer of the waiving party.

10.9 Severability. If any provision of this Agreement is found by a court of competent jurisdiction to be unenforceable, then such provision shall be construed, to the extent feasible, so as to render the provision enforceable, and if no feasible interpretation would save such provision, it shall be severed from the remainder of this Agreement. The remainder of this Agreement shall remain in full force and effect, unless the severed provision is essential and material to the rights or benefits received by either party. In such event, the parties shall negotiate, in good faith, and substitute a valid and enforceable provision or agreement that most nearly implements the parties' intent in entering into this Agreement.

10.10 Notices. Any notice required or permitted to be given under this Agreement must be in writing and delivered either in person, by any method of mail (postage prepaid) requiring return receipt, by overnight courier or by electronic mail, to the party to be notified at its address given below, or at any address such party has previously designated by prior written notice to the other. Notice shall be deemed sufficiently given for all purposes upon the earliest of: (a) the date of actual receipt; (b) if mailed by international courier, seven (7) days after the date of postmark;

(c) if delivered by international express courier, three (3) days after the date of pick up; or (d) if delivered by electronic mail, upon confirmation of transmission.

If to Artiva: Artiva Biotherapeutics, Inc.
4747 Executive Drive, Suite 1150
San Diego, CA 92121
USA
Attention: Chief Executive Officer Email: [***]

If to GCLC: Green Cross LabCell Corporation
107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si,
Gyeonggi-do, 446-850, 16924, Republic of South Korea.
Attention: Chief Executive Officer
Email: [***]

10.11 Force Majeure. In the event of a delay caused by inclement weather, fire, flood, epidemic, quarantine, strike or other labor dispute, act of God, act of governmental officials or agencies, or any other cause beyond the control of the parties, the party or parties so affected shall be excused from performance hereunder for the period of time attributable to such delay, which may extend beyond the time lost due to one or more of the causes mentioned above. In the event of any such delay, the parties may, in their sole discretion, amend this Agreement or any Work Order, as appropriate, by mutual written agreement.

10.12 Interpretation. The headings of clauses contained in this Agreement preceding the text of the sections, subsections and paragraphs hereof are inserted solely for convenience and ease of reference only and shall not constitute any part of this Agreement, or have any effect on its interpretation or construction. All references in this Agreement to the singular shall include the plural where applicable. Unless otherwise specified, references in this Agreement to any section shall include all subsections and paragraphs in such Section and references in this Agreement to any subsection shall include all paragraphs in such subsection. All references to days in this Agreement shall mean calendar days, unless otherwise specified. Ambiguities and uncertainties in this Agreement, if any, shall not be interpreted against either party, irrespective of which party may be deemed to have caused the ambiguity or uncertainty to exist. This Agreement has been prepared in the English language, and the English language shall control its interpretation. In addition, all notices required or permitted to be given hereunder, and all written, electronic, oral or other communications between the parties regarding this Agreement, shall be in the English language.

10.13 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. This Agreement may be executed via electronic signature or via the exchange of signed portable document format ("**PDF**") versions of this Agreement. Such electronic signatures, and signatures on PDF versions of this Agreement, will be considered the legally binding equivalent of wet-ink, original, hand-written signatures.

[Signature Page Follows]

[Page 14 of 15]

IN WITNESS WHEREOF, the parties have by duly authorized persons executed this Agreement as of the Effective Date.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Thomas J. Farrell
Name: Thomas J. Farrell
Title: Chief Executive Officer
Date: 8/2/2020

GREEN CROSS LABCELL CORPORATION

By: /s/ Dae-Woo Park
Name: Dae-Woo Park
Title: Chief Executive Officer
Date: 8.3.2020

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.**

SELECTED PRODUCT LICENSE AGREEMENT (AB-101)

THIS SELECTED PRODUCT LICENSE AGREEMENT (the “**Agreement**”) is made and entered into as of November 21, 2019 (the “**Effective Date**”) by and between **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Artiva**”), having a place of business at 4747 Executive Drive, Suite 1150, San Diego, CA 92121, USA, and **GREEN CROSS LABCELL CORPORATION**, a Korean corporation (“**GCLC**”), with its principal place of business at 107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 446-850, 16924, Republic of South Korea. Artiva and GCLC are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties**”.

RECITALS

A. The Parties have previously entered into that certain Option and License Agreement, dated as of September 4, 2019 (as may be amended, the “**Option Agreement**”), pursuant to which, among other things, GCLC has granted to Artiva an exclusive option to obtain an exclusive license under Selected Product Technology to develop, manufacture and commercialize Selected Products in the Field in the Territory (each term as defined in the Option Agreement) (the “**Option**”).

B. Artiva has exercised its Option with respect to the Product in accordance with the terms and conditions of the Option Agreement, and GCLC has granted to Artiva the Selected Product License (as defined in the Option Agreement) as to the Product.

C. In accordance with Section 5.3 of the Option Agreement, the Parties desire to enter into this Agreement to set forth additional terms and conditions of the Selected Product License as to the Product.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises, covenants and conditions contained in this Agreement, the Parties agree as follows:

1. DEFINITIONS

Capitalized terms used in this Agreement (other than the headings of the Sections or Articles) have the following meanings set forth in this Article 1, or, if not listed in this Article 1, the meanings as designated in the text of this Agreement. Capitalized terms used in this Agreement but not otherwise defined herein shall have such meanings ascribed to them in the Option Agreement.

1.1 “Combination Product” means any combination of the Product with one (1) or more other active ingredients, products or services that is not the Product, where such products are sold either as a fixed dose/unit or as separate doses/units in a single package for a single price.

1.2 “Existing Third Party Agreements” means the following Agreements to which GCLC is a party with the following Third Parties that relate to NK Cells, Licensed Products or Information or Patents related to NK Cells or Licensed Products: [***].

1.3 “Indication” means a human disease, disorder or medical condition that is [***].

1.4 “Initiation” of a clinical trial means the first dosing of the first subject enrolled in such clinical trial.

1.5 “[***]” means [***].

1.6 “[***]” means [***].

1.7 “[***]” means [***].

1.8 “**Net Sales**” means, with respect to a given period of time, the gross amount invoiced by Artiva and its Affiliates and Sublicensees (each, a “**Selling Party**”) to Third Party (other than any Selling Party) purchasers for the sale or distribution of Products in the Territory, less the following deductions and offsets that are actually incurred, allowed, accrued, paid or taken and are allocated with respect to such sale or distribution:

(a) [***];

(b) [***];

(c) [***];

(d) [***];

(e) [***];

(f) [***]; and

(g) [***].

Such amounts shall be determined in accordance with GAAP.

With respect to (c) above, (i) no deductions will be made for commissions paid to individuals whether they be with independent sales agencies or regularly employed by Licensee and on its payroll, or for cost of collections, and (ii) if a Product is distributed at a discounted price that is substantially lower than the customary price charged by Licensee, or distributed for non-cash consideration (whether or not at a discount), Net Sales will be calculated based on the non-discounted amount of the Product charged to an independent Third Party during the same calendar quarter or, in the absence of such sales, on the fair market value of the Product.

Sales of Products by a Selling Party to another Selling Party for resale by such entity to a Third Party (other than a Selling Party) shall not be deemed a sale for purposes of this definition of “Net Sales,” *provided* that the subsequent resale is included in the computation of Net Sales. Transfers or dispositions of Products as free promotional samples in commercially reasonable amounts, consistent with prevailing industry standards, and Products used in research, development or regulatory activities, compassionate use, indigent programs, investigator-initiated trials or on a named patient basis shall be disregarded in determining Net Sales.

If any discounts or other deductions or rebates are made in connection with sales of a Product that is bundled or sold together with other products of the Selling Parties, then the discount, deduction or rebate applied to the Product shall not exceed the discount, deduction or rebate applied to any of the other products of the Selling Parties in such arrangement based upon the respective list prices of the Product and such other products prior to applying the discount, unless Artiva provides evidence reasonably satisfactory to GCLC that such difference is commercially reasonable and does not unfairly prejudice the Product in favor of such other products.

For Products which are sold as Combination Products, the Net Sales for such Combination Products shall be adjusted by [***].

1.9 “Pivotal Clinical Trial” means a pivotal study in human patients with a defined dose or a set of defined doses of the Product designed or intended to ascertain efficacy and safety of the Product for the purpose of enabling the preparation and forming the primary basis for submission of a BLA for the Product to the competent Regulatory Authority in a country of the Territory, which may be a Phase 3 study as further defined in 21 C.F.R. 312.21(c), as amended from time to time, or a Phase 2 study as further defined in 21 C.F.R. 312.21(b), as amended from time to time, or in each case defined in the corresponding regulations in any jurisdiction or country other than the United States, or any amended or successor regulations.

1.10 “Product” means the Licensed Product described in Exhibit 1.10 and any Combination Product of such Licensed Product.

1.11 “Product Know-How” means all Information Controlled by GCLC or any GCLC Affiliate as of the Effective Date or during the Term that relate specifically to the Product or its manufacture or use (and are not otherwise included in GCLC Core Technology). Product Know-How excludes any Additional Joint Inventions.

1.12 “Product Patents” means any Patents in the Territory Controlled by GCLC or any GCLC Affiliate as of the Effective Date or during the Term that relate specifically to a Product or its manufacture or use (and are not otherwise included in GCLC Core Technology). Exhibit 1.12 sets forth the Product Patents existing on the Effective Date. Exhibit 1.12 may be updated from time-to-time during the Term upon the mutual written agreement of the Parties. Product Patents excludes any Additional Joint Patents.

1.13 “Product Technology” means the Product Know-How and Product Patents.

1.14 “Sublicensee” means a Third Party to whom Artiva grants a sublicense under some or all of the rights granted to Artiva pursuant to any Product License, beyond the mere right to purchase Products from or to provide services on behalf of Artiva and its Affiliates. In no event shall GCLC or any of its Affiliates be deemed a Sublicensee.

1.15 “Territory” means all countries in the world, excluding Asia, Australia and New Zealand.

1.16 Additional Definitions. Each of the following definitions is set forth in the section of the Agreement indicated below:

<u>Definition</u>	<u>Section</u>
Additional Joint Inventions	4.1
Additional Joint Patents	4.1
Agreement	Preamble

Artiva	Preamble
Artiva Indemnitees	7.1(b)
Claims	7.1(a)
Effective Date	Preamble
GCLC	Preamble
GCLC Indemnitees	7.1(a)
Indemnified Party	7.1(c)
Indemnifying Party	7.1(c)
Parties/Party	Preamble
Product Royalties	3.1(a)
Product Royalty Term	3.1(b)
Product License	2.1
Selling Party	1.8
Term	5.1
Third Party License	3.1(e)(ii)

2. LICENSES AND RELATED RIGHTS

2.1 License Grant. Subject to the terms and conditions of this Agreement, GCLC hereby grants Artiva during the Term an exclusive (even as to GCLC and its Affiliates), royalty-bearing license, with the right to sublicense through multiple tiers as provided in Section 2.2, under the Product Technology, and GCLC's interest in Additional Joint Inventions and Additional Joint Patents, to research, develop, make, have made, use, offer for sale, sell and import Products in the Field and in the Territory (the "**Product License**").

2.2 Sublicensing; Subcontracting. Artiva shall have the right to grant sublicenses of rights granted under the Product License, or subcontract its activities with respect to any Product, to its Affiliates, contractors and any other Third Party, *provided* that: (a) Artiva shall remain responsible for the performance or failure to perform by any such Affiliate, Sublicensee and subcontractor under their respective sublicensed or subcontracted rights or obligations to the same extent as if such activity were performed (or was failed to be performed) by Artiva; and (b) each such sublicense and subcontract agreement shall be consistent with the terms and conditions of this Agreement. Artiva shall provide GCLC with a copy of any sublicense agreement entered into with a Sublicensee, and any amendment thereto, within [***] days of its execution (provided that Artiva may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement).

2.3 Reserved Rights. GCLC hereby expressly reserves (a) all rights to practice, and to grant licenses under, the Product Technology and GCLC's interest in Additional Joint Inventions and Additional Joint Patents outside the Territory, and (b) the right to conduct research and development to be conducted by GCLC or any GCLC Affiliate as contemplated by this Agreement and any services or manufacturing agreements entered into between GCLC or any GCLC Affiliate and Artiva.

2.4 Negative Covenant. Artiva covenants that it will not and will not permit any of its Affiliates, Sublicensees or subcontractors to use or practice any Product Technology or GCLC's interest in Additional Joint Inventions and Additional Joint Patents outside the scope of the Product License. GCLC covenants that it will not and will not permit any of its Affiliates, or grant the right to or assist or collaborate with any Third Party, to directly or indirectly during the Term research, develop, make, have made, use, offer for sale, sell and import any Product in the Field in the Territory, except as expressly authorized in this Agreement.

2.5 No Implied Licenses. Except as explicitly set forth in this Agreement, any other Selected Product License Agreement(s) and the Option Agreement, neither Party shall be deemed by estoppel or implication to have granted the other Party any license or other right to any intellectual property of such Party.

2.6 Disclosure of GCLC Core Know-How. Within [***] days after the Effective Date, GCLC shall disclose to Artiva the Product Know-How existing as of the Effective Date. In addition, GCLC shall disclose to Artiva any Product Know-How that comes into existence after the Effective Date and was not previously provided to Artiva promptly after the development thereof (and at least every [***] months). During the Term, GCLC shall make available to Artiva, on a reasonable consultation basis, such advice of its technical personnel as may be reasonably requested by Artiva in connection with such transfer of Product Know-How.

2.7 Development Option. If GCLC desires to pursue development of a Product in combination with an antigen-specific therapy that Artiva has determined not to pursue, the Parties shall discuss in good faith and agree on a co-development arrangement for such Product in combination with such antigen-specific therapy in mutually agreed Indications in the Territory, which shall not overlap with Indications for which Artiva is developing a Product.

3. COMPENSATION

3.1 Product License Royalty Payments.

(a) Product License Royalty Rates. Artiva shall pay to GCLC royalties on Net Sales of Products, the manufacture, use or sale of which are claimed by or use any Product Technology, on a country-by-country and Product-by-Product basis during the Product Royalty Term, as calculated by multiplying the applicable portion of aggregate Net Sales of the Subject Select Product in the Territory by the corresponding royalty rate, as set forth in the table below, subject to the applicable adjustments in accordance with Section 3.1(e) below (the “**Product Royalties**”).

<u>Annual Net Sales of the Product in the Territory</u>	<u>Royalty Rate</u>
For that portion of annual aggregate Net Sales of the Product less than or equal to \$[***]	[***]
For that portion of annual aggregate Net Sales of the Product greater than \$[***] and less than or equal to \$[***]	[***]
For that portion of annual aggregate Net Sales of the Product greater than \$[***] and less than or equal to \$[***].	[***]
For that portion of annual aggregate Net Sales of the Product greater than \$[***]	[***]

(b) Product Royalty Term. Royalties payable under Section 3.1(a) shall be payable on a Product-by-Product and country-by-country basis in the Territory during the period commencing on the First Commercial Sale of such Product in such country in the Territory and continuing until the later of (i) expiration of the last-to-expire Valid Claim of the Product Patents in the country of sale claiming such Product or the manufacture or use of such Product; (ii) expiration of any Regulatory Exclusivity for such Product in such country; and (iii) the tenth (10th) anniversary of the First Commercial Sale of such Product in such country (the “**Product Royalty Term**”). Following expiration of the Product Royalty Term for any Product in a given country, no further Product Royalties shall be payable in respect of Product Technology for such Product in such country, and the Product License granted to Artiva under Section 2.1 with respect to such Product in such country shall automatically become fully paid-up, perpetual and royalty-free and shall survive any expiration or termination of this Agreement.

(c) Royalty Reports and Payments. Within [***] days following the end of each calendar quarter following the First Commercial Sale of a Product upon which Product Royalties are payable anywhere in the Territory, Artiva shall provide GCLC with a report containing the following information for the applicable calendar quarter, on a Product-by-Product and country-by-country basis: (i) Net Sales of such Product in such country; (ii) the basis for any adjustments to royalties due to GCLC on account of Net Sales of such Product in such country; (iii) a calculation of the royalty payment due to GCLC on account of Net Sales of such Product in such country; and (iv) the exchange rate used in calculating any of the foregoing; *provided* that the obligations under this Section 3.1(c) may be satisfied by the report due by Artiva to GCLC under Section 6.1(c) of the Option Agreement.

(d) Existing Third Party Payment Obligations. GCLC shall be responsible for any payments to any Affiliates or Third Parties for Patents or Information licensed or acquired by GCLC prior to the Effective Date, excluding the [***], which are included in the Product Technology.

(e) Royalty Adjustments. Product Royalties shall be subject to adjustment as a result of the events set forth below.

(i) No Valid Claim. During any part of the Product Royalty Term for a Product in which there is no Valid Claim of either the GCLC Core Patents or the Product Patents in the country of sale claiming such Product or the manufacture, use or sale of such Product in such country, the Product Royalties shall be reduced by [***], which reduction will be calculated by determining the portion of total Net Sales of the relevant Product in a calendar quarter that is attributable to the country in which such reduction applies, and determining the total Product Royalties for such Product without reduction, and then reducing by [***] the applicable portion (based on Net Sales of such Product in such country as a percentage of total Net Sales of such Product) of total Product Royalties attributable to such Product in such country.

(ii) Third Party Royalty Credit. If Artiva or any of its Affiliates or Sublicensees obtains a license or sublicense from any Third Party under any intellectual property that is necessary in order to manufacture, use, sell, offer for sale or import a Product in the Territory (including any license by a Third Party to Artiva or sublicense by GCLC to Artiva described in Section 5.4(e) of the Option Agreement, but excluding any license or sublicense to Artiva under an Existing Third Party Agreement as provided in Section 5.4(d) of the Option Agreement) (each a “**Third Party License**”), and GCLC agrees that such Third Party License is necessary to manufacture, use, sell, offer for sale or import such Product in the Territory, such agreement not to be unreasonably withheld, then Artiva may deduct [***] of any royalty (or comparable payment based on sales of such Product) payable by Artiva or its Affiliate or Sublicensee in any calendar quarter in consideration for such Third Party License from the Product Royalties that would otherwise be due in any calendar quarter for such Product. Any amount paid to such Third Party which is entitled to be deducted under this Section 3.1(e)(ii) but is not deducted as a result of the limitation set forth in Section 3.1(e)(iv) shall be carried over and applied against Product Royalties payable to GCLC in respect of such Product in such country in subsequent calendar quarters until the full deduction is taken. In no event may Artiva credit payments under a Third Party License to reduce the Product Royalties with respect to a Product under this Section 3.1(e)(ii) and also to reduce the Core IP Royalties payable with respect to the same Product that is a Licensed Product under the Option Agreement.

(iii) Biosimilar Reduction. If a Biosimilar Product to a Product is sold in any country in the Territory during the Product Royalty Term for such Product and country, the Product Royalties payable with respect to such Product in such country will be reduced by [***] for the remainder of such Product Royalty Term.

(iv) Limitation. The total deductions under Sections 3.1(e)(ii) and (iii) shall not reduce the Product Royalties payable to GCLC under Section 3.1 (as reduced under Section 3.1(e)(i), if applicable) with respect to a Product in a given country in any calendar quarter by more than [***]. In no event will the Product Royalties be reduced for any reason whatsoever other than as provided in this Section 3.1(e).

3.2 Milestone Payments.

(a) Development Milestone Payments. Artiva shall make the following non-refundable and non-creditable development milestone payments to GCLC within [***] days after the first achievement of each applicable milestone event with respect to a Product by Artiva or its Affiliates or Sublicensees. Each such milestone payment shall be paid only once during the Term, the first time a Product reaches such milestone event and regardless of the number of times such milestone event is reached for a Product and of the number of subsequent Products reaching such milestone event. For clarification, the total milestone payments payable hereunder if all milestone events are achieved is [***].

No.	Milestone Event	Milestone Payment
1	***	***
2	***	***
3	***	***
4	***	***
5	***	***
6	***	***
7	***	***
8	***	***
9	***	***
10	***	***
11	***	***
12	***	***

(b) Sales Milestone Payments. Artiva shall make the following one-time, non- refundable and non-creditable sales milestone payments to GCLC when the aggregate annual Net Sales of Products in the Territory first reach the thresholds specified below. Artiva shall notify GCLC promptly of the achievement of each such sales threshold. Each sales milestone payment shall be made by Artiva within *** days after the end of the calendar quarter in which such sales threshold is achieved. To the extent more than one sales threshold is reached in any given calendar year, then the applicable milestone payment for each such achievement shall be due and owing with respect to such calendar year. For clarification, the total milestone payments payable hereunder if all milestone events are achieved is ***.

Milestone	Milestone Payment
Territory-wide Net Sales of Products in a calendar year of at least \$[***]	[***]
Territory-wide Net Sales of Products in a calendar year of at least \$[***]	[***]
Territory-wide Net Sales of Products in a calendar year of at least \$[***]	[***]

3.3 Payment Method; Currency. All payments due under this Agreement to GCLC shall be made by bank wire transfer in immediately available funds to an account designated by GCLC. All payments hereunder shall be made in Dollars. When conversion of payments from any currency other than Dollars is required, such conversion shall be at an exchange rate equal to the weighted average of the rates of exchange for the currency of the country from which such payments are payable as published by *The Wall Street Journal*, Western U.S. Edition, during the calendar quarter in which the applicable sales were made.

3.4 Records; Inspection. Artiva shall, and shall cause its Affiliates and Sublicensees to, keep complete, true and accurate books of account and records for the purpose of determining the payments to be made under this Agreement. Such books and records shall be kept for [***] years following the end of the calendar year to which they pertain. Such records shall be open for inspection during such period by independent accountants, solely for the purpose of verifying payment statements hereunder for a period covering not more than [***] months prior to the date of request; *provided* that no period shall be subject to inspection under this section more than once and inspections with respect to payments on a Product under this Agreement shall be done concurrently with respect to payments on the same Product under the Option Agreement to avoid duplication. Such inspections shall be made no more than once each calendar year, on reasonable notice during normal business hours. The independent accountants will execute a reasonable written confidentiality agreement with Artiva and will disclose to GCLC only such information as is reasonably necessary to provide GCLC with information regarding any actual or potential discrepancies between amounts reported and actually paid and amounts payable under this Agreement. The auditor will send a copy of the report to Artiva at the same time it is sent to GCLC. The report sent to both Parties will include the methodology and calculations used to determine the results. Any unpaid amounts that are discovered shall be paid promptly by Artiva. Inspections conducted under this Section 3.4 shall be at the expense of GCLC, unless the inspection discloses an underpayment by Artiva of [***] or more of the amount due for any period covered by the inspection, whereupon all costs relating to the inspection for such period shall be paid promptly by Artiva. If the inspection discloses an overpayment by Artiva, then Artiva will deduct the amount of such overpayment from amounts otherwise owed to GCLC under this Agreement, unless no further payments are due hereunder, in which case the amount of such overpayment shall be refunded by GCLC to Artiva.

3.5 Income Tax Withholding. Except as otherwise provided herein, GCLC will pay any and all taxes levied on account of any payments made to it under this Agreement. GCLC shall be responsible for any transfer, documentary, sales use, stamp, registration, value added or other similar tax (“**Transfer Tax**”) that is imposed with respect to the payments or the related transfer of rights or other property pursuant to the terms of this Agreement. If any taxes are required to be withheld by Artiva from any payment made to GCLC under this Agreement (“**Withholding Taxes**”), Artiva shall (a) deduct such Withholding Taxes from the payment made to GCLC, (b) timely pay the Withholding Taxes to the proper taxing authority, and (c) send proof of payment to GCLC and certify its receipt by the taxing authority within [***] days following such payment and all such Withholding Taxes shall be treated for all purposes under this Agreement as having been paid to GCLC. To extent Artiva fails to withhold Withholding Taxes from, or apply and pay Transfer Taxes with respect to, any payment to GCLC and it is determined that Artiva should have withheld Withholding Taxes or applied and paid Transfer Taxes, GCLC agrees to indemnify and/or reimburse Artiva for any Withholding Taxes or Transfer Taxes, along with penalties and interest as applicable.

3.6 Tax Documentation. GCLC has provided a properly completed and duly executed IRS Form W-8BEN-E to Artiva. Prior to the receipt of any payment under this Agreement, GCLC (and any other recipient of payments by Artiva under this Agreement) shall, to the extent it is legally permitted to, provide to Artiva, at the time or times reasonably requested by Artiva or as required by applicable Law, such properly completed and duly executed IRS Forms W-8 or W-9 claiming the benefits of an applicable tax treaty in the case of IRS Form W-8BEN-E. Such tax forms will, if applicable and legally permissible, claim the benefits of an applicable tax treaty to permit payments made under this Agreement to be made without, or at a reduced rate of, withholding for taxes.

4. INTELLECTUAL PROPERTY

4.1 Ownership. All Information, discoveries and inventions (patentable or not) generated, conceived or reduced to practice in the performance of the research, development, commercialization or other activities contemplated by this Agreement, including all intellectual property rights therein, shall be as follows: (a) Artiva shall own all Information, discoveries and inventions made solely by employees, agents or independent contractors of Artiva and all intellectual property rights therein, (b) GCLC shall own all Information, discoveries and inventions made solely by employees, agents or independent contractors of GCLC and all intellectual property rights therein, and (c) the Parties shall jointly own all Information, discoveries and inventions made jointly by employees, agents or independent contractors of each Party (“**Additional Joint Inventions**”) and all intellectual property rights therein. All Patents claiming Joint Inventions shall be referred to herein as “**Additional Joint Patents**”. Subject to the rights and licenses granted under this Agreement, any other Selected Product License Agreement and the Option Agreement, each Party shall be entitled to practice, grant licenses to, assign and exploit the Additional Joint Inventions and Additional Joint Patents without the duty of accounting or seeking consent from the other Party.

4.2 Patent Prosecution.

(a) Product Patents. Artiva shall have the first right, but not the obligation, at Artiva's expense, to control the preparation, filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of the Product Patents in the Territory. Artiva shall keep GCLC reasonably informed of progress with regard to the preparation, filing, prosecution and maintenance of Product Patents in the Territory, including the countries in the Territory in which it intends to file, maintain or abandon a given Product Patent. Artiva will notify GCLC of all warning letters, conflict proceedings, reexaminations, reissuance, oppositions, revocation proceedings or any other material challenge relating to a given Product Patent in the Territory. Artiva will consult with, and consider in good faith the requests and suggestions of, GCLC with respect to strategies for filing and prosecuting such Product Patents in the Territory. In the event that Artiva desires to abandon or cease prosecution or maintenance of any Product Patent in the Territory, Artiva shall provide reasonable prior written notice to GCLC of such intention (which notice shall, in any event, be given no later than [***] days prior to the next deadline for any action that may be taken with respect to such Product Patent in the Territory with the applicable patent office), and upon GCLC's written election provided no later than [***] days after such notice from Artiva, Artiva shall continue prosecution or maintenance of such Product Patent at GCLC's direction and expense. If GCLC does not provide such election within [***] days after such notice from Artiva, Artiva may continue prosecution and maintenance of such Product Patent in the Territory or discontinue prosecution and maintenance of such Product Patent in the Territory. GCLC shall have the sole right, but not the obligation, at GCLC's expense, to control the preparation, filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of the Product Patents outside the Territory. GCLC shall keep Artiva reasonably informed of progress with regard to the preparation, filing, prosecution and maintenance of Product Patents outside the Territory to the extent such activities could affect the Product Patents in the Territory. The provisions of this Section 4.2(a) are subject to the rights of [***] under the [***].

(b) Additional Joint Patents. Additional Joint Patents shall be governed by Section 4.2(a).

(c) Cooperation. Promptly following the Effective Date, (but no less than [***] days before any statutory bar date), GCLC will transfer to Artiva all Information concerning the Product Patents in the Territory. GCLC shall cooperate with Artiva and shall execute any power of attorney or similar document, in each case to the extent reasonably required to allow Artiva to assume the preparation, filing, prosecution and maintenance in the Territory of the Product Patents in Artiva's name. Artiva shall cooperate with GCLC, in each case to the extent reasonably required to allow GCLC to assume the preparation, filing, prosecution and maintenance, of any Patent abandoned by Artiva pursuant to Section 4.2(a).

4.3 Patent Enforcement.

(a) Notification. If either Party becomes aware of any existing or threatened infringement of the Product Patents or Additional Joint Patents, or the filing of a BLA by a Third Party for a product that names a Product as a reference product (or similar filing in a country other than the U.S.), it shall promptly notify the other Party in writing to that effect, and the Parties will consult with each other regarding any actions to be taken with respect to such infringement.

(b) Right to Enforce. Artiva shall have the first right, but shall not be obligated, to bring and control an infringement action with respect to any Product Patent or Additional Joint Patent in the Territory against any person or entity, at Artiva's sole cost and expense. If Artiva does not bring such an action with respect to a Product Patent or Additional Joint Patent in the Territory (or settle or otherwise secure the abatement of such infringement) prior to the earlier of: (i) [***] days following Artiva's receipt or delivery of the notice under Section 4.3(a), or (ii) [***] days before the deadline, if any, set forth in the applicable Laws for the filing of such actions, GCLC shall have the right to bring and control any such action, at its own expense and by counsel of its own choice. The provisions of this Section 4.3(b) are subject to the rights of [***] under the [***].

(c) Cooperation. Each Party shall cooperate fully with the enforcing Party in such enforcement, at such enforcing Party's request and expense, including joining such action as a party plaintiff if required by applicable Laws to pursue such action. The enforcing Party shall keep the other Party regularly informed of the status and progress of such enforcement efforts, shall reasonably consider the other Party's comments on any such efforts. The non-enforcing Party shall be entitled to separate representation in such matter by counsel of its own choice and at its own expense, but such Party shall at all times cooperate fully with the enforcing Party. Neither Party shall have the right to settle any patent infringement litigation under this Section 4.3 in a manner that diminishes the rights or interests of the other Party without the prior written consent of such other Party, such consent not to be unreasonably withheld or delayed.

(d) Expenses and Recoveries. The enforcing Party bringing a claim, suit or action under this Section 4.3 shall be solely responsible for any expenses incurred by such Party as a result of such claim, suit or action. If such Party recovers monetary damages in such claim, suit or action, except as otherwise agreed by the Parties in connection with a cost-sharing arrangement, such recovery shall be allocated first to the reimbursement of any expenses incurred by the Parties in such litigation, and any remaining amounts shall be shared as follows: [***].

(e) Enforcement Outside the Territory. GCLC shall have the sole right, but shall not be obligated, to bring and control an infringement action with respect to any Product Patent or Additional Joint Patent outside the Territory against any person or entity, at GCLC's sole cost and expense. GCLC shall keep Artiva reasonably informed of the enforcement of Product Patents or Additional Joint Patents outside the Territory to the extent such activities could affect the Product Patents or Additional Joint Patents in the Territory.

4.4 Patent Oppositions and Other Proceedings.

(a) In the Territory. If a Product Patent or Additional Joint Patent in the Territory becomes the subject of any proceeding commenced by a Third Party in connection with an opposition, action for declaratory judgment, nullity action, interference or other attack upon the validity, title or enforceability thereof, then Artiva shall have the first right, but not the obligation, to control such defense at its own expense using counsel of its own choice. If Artiva decides that it does not wish to defend against such action, it shall notify GCLC reasonably in advance of all applicable deadlines, and GCLC shall thereafter have the right, but not the obligation, to assume defense of such action at its own expense.

(b) The Party controlling any defense under Section 4.4(a) shall permit the non-controlling Party to participate in the proceedings to the extent permissible under applicable Laws and to be represented by its own counsel at the non-controlling Party's expense. Notwithstanding any of the foregoing, the Party controlling any enforcement action pursuant to Section 4.3 shall also have the sole right to control the response to any attack on the validity, title, or enforceability of a Patent that is asserted by the alleged infringer(s) as a counterclaim or affirmative defense in such action. Neither Party shall have the right to settle any proceeding under this Section 4.4 in a manner that diminishes the rights or interests of the other Party without the prior written consent of such other Party, such consent not to be unreasonably withheld or delayed.

(c) Outside the Territory. GCLC shall have the sole right, but shall not be obligated, to control any opposition, action for declaratory judgment, nullity action, interference or other attack upon the validity, title or enforceability of any Product Patent or Additional Joint Patent outside the Territory, at GCLC's own expense using counsel of its own choice. GCLC shall keep Artiva reasonably informed of any such defense of Product Patents or Additional Joint Patents outside the Territory to the extent such activities could affect the Product Patents or Additional Joint Patents in the Territory.

The provisions of this Section 4.4 are subject to the rights of [***] under [***].

4.5 Patent Marking. Artiva shall mark Product (or when the character of the product precludes marking, the package containing any such Product) marketed and sold by Artiva or its Affiliates or Sublicensees in accordance with all applicable Laws relating to patent marking.

4.6 Infringement of Third Party Rights. If any Product used or sold by Artiva or its Affiliates or Sublicensees becomes the subject of a Third Party's claim or assertion of infringement of a Patent, each Party shall promptly notify the other Party. Neither Party shall have the right to settle any patent infringement litigation under this Section 4.6 in a manner that diminishes the rights or interests of the other Party without the written consent of such other Party (which shall not be unreasonably withheld).

5. TERM AND TERMINATION

5.1 Term. This Agreement shall become effective on the Effective Date and, unless earlier terminated pursuant to this Article 5, shall remain in effect until the expiration of the last Product Royalty Term in the Territory (the "**Term**").

5.2 Termination for Material Breach. Each Party shall have the right to terminate this Agreement in its entirety immediately upon written notice to the other Party if the other Party materially breaches its obligations under this Agreement and, after receiving written notice identifying such material breach in reasonable detail, fails to cure such material breach within sixty (60) days from the date of such notice (or within thirty (30) days from the date of such notice in the event such material breach is solely based on the breaching Party's failure to pay any amounts due hereunder); *provided, however*, in the case of a breach or violation that cannot be cured within such sixty (60) day period, the non-breaching Party may terminate this Agreement following such sixty (60) day period only if the breaching Party shall have failed to commence substantial remedial actions within such sixty (60) day period and to use reasonable efforts to pursue the same. Any right to terminate under this Section 5.2 shall be stayed and the cure period tolled in the event that, during any cure period, the breaching Party shall have initiated dispute resolution in accordance with Article 13 of the Option Agreement with respect to the alleged breach, which stay and tolling shall last so long as the breaching Party diligently and in good faith cooperates in the prompt resolution of such dispute resolution proceedings. Each Party shall be entitled to offset, against amounts payable to the other Party under this Agreement, any amounts of damages determined, in a final decision by the applicable court action or other legal proceeding, to be owed to such Party by the other Party based on the other Party's material breach of this Agreement.

5.3 Termination Upon Insolvency. Either Party may terminate this Agreement upon written notice to the other Party, if, at any time, the other Party (a) files in any court or agency pursuant to any statute or regulation of any state, country or jurisdiction, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of such other Party or of its assets, (b) is served with an involuntary petition against it, filed in any insolvency proceeding that is not dismissed within ninety (90) days after the filing thereof, or (c) makes an assignment of the assets associated with this Agreement for the benefit of its creditors.

5.4 Termination by Artiva. Artiva may terminate this Agreement in its entirety without cause upon ninety (90) days prior written notice to GCLC.

5.5 Effects of Expiration or Termination of this Agreement. Upon any expiration or termination of this Agreement, all rights and obligations of the Parties shall terminate entirely, except as provided in this Section 5.5 and Section 5.7 and the sections referenced therein and:

(a) Termination of License to Artiva. All rights and licenses granted to Artiva hereunder shall terminate, except for any and all licenses that survive expiration or termination in accordance with the last sentence of Section 3.1(b); *provided* that if this Agreement is terminated by GCLC pursuant to Section 5.2 or 5.3, any sublicense granted to a Sublicensee that is not in breach under the applicable sublicense (and whose actions or omissions did not result in a breach by Artiva giving rise to GCLC's right of termination) will continue as a direct license from GCLC so long as the Sublicensee makes all payments to GCLC required under Section 3.1 and Section 3.2.

(b) Remaining Inventories. Artiva or its Affiliates, to the extent that such parties continue to have stocks of usable Products that would be subject to payment of Product Royalties pursuant to Section 3.1, may continue to fulfill orders received for Products until [***] months following the date of termination. For Products sold by Artiva or its Affiliates after the effective date of a termination, Artiva shall continue to pay Product Royalties pursuant to Section 3.1, as applicable.

(c) Additional Effects of Termination. Upon any termination of this Agreement, except termination of this Agreement by Artiva under Section 5.2, effective as of such termination, Artiva shall promptly (A) assign and transfer (or cause to be assigned and transferred) to GCLC or its designee (and provide copies of) all Regulatory Materials and Regulatory Approvals held in the name of Artiva, or any Affiliate it controls (within the meaning of Section 1.1 of the Option Agreement), relating to any Product, including related correspondence with Regulatory Authorities and (B) disclose to GCLC, and grant to GCLC a Right of Reference and Use (as that term is defined in 21 C.F.R. § 314.3(b) or any non-United States equivalent) with respect to, all pre-clinical and clinical data, including pharmacology and biology data, in Artiva's or its applicable controlled Affiliates' Control with respect to any Product.

5.6 Damages; Relief. Termination of this Agreement shall not preclude either Party from claiming any other damages, compensation or relief that it may be entitled to upon such termination.

5.7 Survival. Termination or expiration of this Agreement shall not affect any rights or obligations of the Parties under this Agreement that have accrued prior to the date of termination or expiration (including any rights or obligations with respect to payments due and owing prior to the date of termination or expiration). Notwithstanding anything to the contrary, the following provisions shall survive any expiration or termination of this Agreement: Articles 1 and 8 and Sections 2.5, 3.1(b) (final sentence only), 3.4 (for the term stated therein), 4.1, 5.5, 5.6, 5.7, 5.8, 6.5, 7.1, 7.2 and 7.3 (for [***] years), as well as Article 1 (Definitions) to the extent necessary to give meaning to terms defined therein, Articles 9 and 13 and Sections 14.2 through Section 14.11 of the Option Agreement as applied to this Agreement pursuant to Section 8.2.

5.8 Rights under Bankruptcy or Insolvency Laws. All rights and licenses granted under or pursuant to this Agreement by one Party to the other Party are, and will otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws, licenses of right to "intellectual property" as defined under Section 101 of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws. The Parties agree that a Party that is a licensee of such rights under this Agreement will retain and may fully exercise all of its rights and elections under the provisions of applicable bankruptcy or insolvency laws. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party to this Agreement under the provisions of applicable bankruptcy or insolvency laws, the other Party will be entitled to a complete duplicate of (or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property, and same, if not already in its possession, will be promptly delivered to it (a) upon any such commencement of a bankruptcy or insolvency proceeding upon its written request therefor, unless the bankrupt Party elects to continue to perform all of its obligations under this Agreement, or (b) if not delivered pursuant to clause (a) above, following the rejection of this Agreement by or on behalf of the bankrupt Party upon written request therefor by the other Party.

6. REPRESENTATIONS AND WARRANTIES AND COVENANTS

6.1 Mutual Representations and Warranties. Each Party hereby represents and warrants to the other Party as follows:

(a) **Corporate Existence.** As of the Effective Date, it is a company or corporation duly organized, validly existing, and in good standing under the Laws of the jurisdiction in which it is incorporated.

(b) **Corporate Power, Authority and Binding Agreement.** As of the Effective Date, (i) it has the corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder; (ii) it has taken all necessary corporate action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder; and (iii) this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, and binding obligation of such Party that is enforceable against it in accordance with its terms.

(c) **No Conflicts.** The execution and delivery of this Agreement, and the performance by such Party of its obligations under this Agreement, including the grant of rights and licenses to the other Party pursuant to this Agreement, does not and will not: (i) conflict with, nor result in any violation of or default under, any instrument, judgment, order, writ, decree, contract or provision to which such Party is bound; (ii) give rise to the suspension, revocation, impairment, forfeiture or non-renewal of any material permit, license, authorization or approval that applies to such Party, its business or operations or any of its assets or properties; or (iii) conflict with any rights granted by such Party to any Third Party or breach any obligation that such Party has to any Third Party.

6.2 GCLC Representations and Warranties. GCLC represents and warrants to Artiva as of the Effective Date that:

(a) GCLC is the sole and exclusive owner of the Product Patents, other than the [***], which are jointly owned with [***], in each case free and clear of all liens, and GCLC has the right to grant the licenses, sublicenses and other rights with respect to the Product Patents that it purports to grant hereunder. Exhibit 1.12 is a true and complete list of all Patents Controlled by GCLC or any GCLC Affiliate as of the Effective Date that relate specifically to a Product or its manufacture or use (other than any GCLC Core Patents). All official fees, maintenance fees and annuities for the Product Patents have been paid through the Effective Date.

(b) All issued Product Patents are in full force and effect and subsisting, and inventorship of each Patent is properly identified on such Patents. No Third Party has asserted in writing that any issued Product Patent is invalid or unenforceable. None of the Product Patents is currently involved in any interference, reissue, reexamination, or opposition proceeding, and no such proceeding is threatened to the Knowledge of GCLC. GCLC has taken reasonable security measures consistent with industry standard practices, including measures against unauthorized disclosure, to protect the secrecy and confidentiality of trade secrets within the Product Know-How. GCLC and GCLC Affiliates have complied with all duties of candor required by applicable Governmental Authorities in the prosecution by GCLC or any GCLC Affiliates of any rights in the Product Technology.

(c) GCLC (i) has provided Artiva a true and complete copy of the Existing Third Party Agreements, including any amendments thereto, and the Existing Third Party Agreements are in full force and effect in accordance with its terms; and (ii) is in compliance in all material respects with its obligations under the Existing Third Party Agreements and, to GCLC's knowledge, (A) the other parties to the Existing Third Party Agreements have not breached the Existing Third Party Agreements in any material respect, and (B) there is no basis for termination of the Existing Third Party Agreements;

(d) To GCLC's Knowledge, there are no activities by Third Parties that would constitute infringement of the Product Patents or misappropriation of the Product Know-How.

(e) Neither GCLC nor any GCLC Affiliate has received any written notice from any person, or have Knowledge of, any actual or threatened claim or assertion that the use or practice of the Product Technology infringes or misappropriates the intellectual property rights of a Third Party.

(f) There are no actual, pending, or alleged or threatened in writing, adverse actions, suits, claims, interferences or formal governmental investigations by or against GCLC or any GCLC Affiliate in or before any court or Governmental Authority involving Product Technology.

(g) GCLC and GCLC Affiliates and, to GCLC's Knowledge, any subcontractor to which GCLC or any GCLC Affiliate has subcontracted activities in connection with any Product have complied in all material respects with all applicable Laws, including all good clinical practices, good laboratory practices and good manufacturing practices, permits, governmental licenses, registrations, approvals, authorizations, orders, injunctions and decrees, in the research, development, manufacture and use of any Product, and neither GCLC nor any GCLC Affiliate nor, to GCLC's Knowledge, any such subcontractor has received any written notice from any Governmental Authority claiming that any such activities as conducted by them are not in such compliance.

(h) All of GCLC's and GCLC Affiliates' employees or subcontractors acting on its behalf who have performed research, development, manufacturing or regulatory activities with respect to any Product are and will be obligated under a binding written agreement to comply with obligations of confidentiality and non-use no less restrictive than those set forth in Article 9 of the Option Agreement.

6.3 Covenants. Each Party covenants to the other Party as follows:

(a) **No Debarment.** Neither such Party nor any of its Affiliates is debarred or disqualified under the United States Federal Food, Drug and Cosmetic Act or comparable applicable Laws in the Territory and, in the course of development, manufacturing or other activities relating to any Product, neither Party nor any of its Affiliates or subcontractors has used or shall use any employee, consultant or subcontractor who has been debarred or disqualified or, to such Party's or its Affiliates' Knowledge, is the subject of debarment or disqualification proceedings by a Regulatory Authority. Each Party shall notify the other Party promptly upon becoming aware that any of its or its Affiliates' employees, consultants or subcontractors involved in any development, manufacturing or other activities relating to any Product has been debarred or disqualified or is the subject of debarment or disqualification proceedings by any Regulatory Authority.

(b) Compliance. Both Parties and their respective Affiliates shall comply in all material respects with all applicable Laws in the development, manufacture and commercialization of any Product, in each case, to the extent applicable, including the statutes, regulations and written directives of the FDA, the EMA and any other Regulatory Authorities, the Federal Food, Drug & Cosmetic Act, as amended, the Prescription Drug Marketing Act, the Federal Health Care Programs Anti-Kickback Law, 42 U.S.C. 1320a-7b(b), the statutes, regulations and written directives of Medicare, Medicaid and all other health care programs, as defined in 42 U.S.C. § 1320a-7b(f), and the Foreign Corrupt Practices Act of 1977, each as may be amended from time to time.

(c) Employees and Subcontractors. During the Term, all employees and subcontractors of a Party or its Affiliates performing research, development, commercialization or other activities contemplated hereunder on behalf of such Party or its Affiliates shall be obligated to undertake in writing obligations of ownership of Information, discoveries and inventions which are the same as those undertaken by the Parties pursuant to Section 4.1.

6.4 Additional GCLC Covenant. GCLC hereby covenants to Artiva that during the Term, GCLC shall not amend, modify or terminate any of the Existing Third Party Agreements in a manner that could affect Artiva, except with Artiva's prior written consent.

6.5 Disclaimer. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR NON-MISAPPROPRIATION OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS, ARE MADE OR GIVEN BY OR ON BEHALF OF A PARTY, AND ALL REPRESENTATIONS AND WARRANTIES, WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE, ARE HEREBY EXPRESSLY EXCLUDED.

7. INDEMNIFICATION AND LIMITATION OF LIABILITY

7.1 Indemnification.

(a) Indemnification by Artiva. Artiva shall defend, indemnify, and hold GCLC and its Affiliates and their respective officers, directors, employees, and agents (the "**GCLC Indemnitees**") harmless from and against any and all damages or other amounts payable by such GCLC Indemnitees, including any reasonable attorneys' fees, taxes (including penalties and interest), and costs of litigation incurred by, such GCLC Indemnitees, to the extent resulting from claims, suits, proceedings, or causes of action brought by any Third Party ("**Claims**") against such GCLC Indemnitees that arise from or are based on: (i) the development, manufacture or commercialization of any Product in the Territory, or performance of the CMC Activities, by or

on behalf of Artiva or its Affiliates or Sublicensees (excluding in all cases GCLC or its Affiliates); (ii) the breach of any of Artiva's obligations under this Agreement, including Artiva's representations, warranties or covenants set forth herein; or (iii) the willful misconduct or negligent acts of Artiva or any of its Affiliates or any of its or their respective officers, directors, employees or agents. The foregoing indemnity obligation shall not apply to the extent to the extent that any of the Claims arises from, is based on, or results from any activity described in Section 7.1(b)(i), (ii) or (iii) for which GCLC is obligated to indemnify the Artiva Indemnitees under Section 7.1(b).

(b) Indemnification by GCLC. GCLC shall defend, indemnify, and hold Artiva and its Affiliates and their respective officers, directors, employees, and agents (the "**Artiva Indemnitees**") harmless from and against any and all damages or other amounts payable by such GCLC Indemnitees, including any reasonable attorneys' fees, taxes (including penalties and interest), and costs of litigation incurred by such Artiva Indemnitees, to the extent resulting from Claims against such Artiva Indemnitees that arise from or are based on: (i) the development, manufacture or commercialization of any Product, or performance of the CMC Activities, by or on behalf of GCLC or its Affiliates, licensees or sublicensees (other than Artiva and its Affiliates and Sublicensees); (ii) the breach of any of GCLC's obligations under this Agreement, including of GCLC's representations, warranties or covenants set forth herein; or (iii) the willful misconduct or negligent acts of GCLC or any of its Affiliates or any of its or their respective officers, directors, employees or agents. The foregoing indemnity obligation shall not apply to the extent to the extent that any of the Claims arises from, is based on, or results from any activity set forth in Section 7.1(a)(i), (ii) or (iii) for which Artiva is obligated to indemnify the GCLC Indemnitees under Section 7.1(a).

(c) Indemnification Procedures. The Party seeking indemnification (individually, the "**Indemnified Party**"), shall promptly notify the other Party (the "**Indemnifying Party**") in writing of the Claim. Such Claim for indemnity shall indicate the nature of the Claim and the basis therefor. Promptly after a Claim is made for which the Indemnified Party seeks indemnity, the Indemnified Party shall permit the Indemnifying Party, at its option and expense, to assume the complete defense of such Claim, *provided* that (i) the Indemnified Party will have the right to participate in the defense of any such Claim at its own cost and expense, (ii) the Indemnifying Party will conduct the defense of any such Claim with due regard for the business interests and potential related liabilities of the Indemnified Party, and (iii) the Indemnifying Party will not agree to any settlement that would admit liability on the part of the Indemnified Party or involve relief other than payment of money, without the approval of the Indemnified Party, not to be unreasonably withheld; and *provided, further*, that if it is reasonably likely that the Parties may have conflicting interests or if it is otherwise not advisable under applicable legal and ethical requirements for the Indemnifying Party's defense counsel to represent both Parties, separate independent counsel shall be retained for each Party at its own expense. The Indemnifying Party will not, in defense of any such Claim, except with the consent of the Indemnified Party, consent to the entry of any judgment or enter into any settlement which does not include, as an unconditional term thereof, the giving by the claimant or plaintiff to the Indemnified Party of a release from all liability in respect thereof. After notice to the Indemnified Party of the Indemnifying Party's election to assume the defense of such Claim, the Indemnifying Party shall be liable to the Indemnified Party for such legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof at the request of the Indemnifying Party.

As to those Claims with respect to which the Indemnifying Party does not elect to assume control of the defense, the Indemnified Party will afford the Indemnifying Party an opportunity to participate in such defense at the Indemnifying Party's own cost and expense, and will not settle or otherwise dispose of any of the same without the consent of the Indemnifying Party.

7.2 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 7.2 IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER SECTION 7.1 OR DAMAGES AVAILABLE FOR A PARTY'S BREACH OF CONFIDENTIALITY OBLIGATIONS IN ARTICLE 9 OF THE OPTION AGREEMENT AS APPLIED TO THIS AGREEMENT.

7.3 Insurance. Each Party shall procure and maintain insurance, including product liability insurance, with respect to its activities hereunder and which is consistent with normal business practices of prudent companies similarly situated at all times during which any Product is being clinically tested in human subjects or commercially distributed or sold. Each Party shall provide the other Party with evidence of such insurance upon request and shall provide the other Party with written notice at least [***] days prior to the cancellation, non-renewal or material changes in such insurance. It is understood that such insurance shall not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 7.

8. MISCELLANEOUS

8.1 Entire Agreement; Amendments. This Agreement, including the Exhibits hereto, any other Selected Product License Agreements and the Option Agreement, sets forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto with respect to the subject matter hereof, and supersedes all prior agreements and understandings between the Parties with respect to the subject matter hereof. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties other than as are set forth in this Agreement. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

8.2 Inclusion of Certain Terms of the Option Agreement. The following terms of the Option Agreement are incorporated herein mutatis mutandis with respect to this Agreement and will continue to apply to this Agreement even if the Option Agreement expires or terminates: Article 1 (Definitions) to the extent necessary to give meaning to terms defined therein, Article 7 (Development), Article 9 (Confidentiality), Article 13 (Dispute Resolution) (except for Section 13.5), Section 14.2 (Force Majeure), Section 14.3 (Notices), Section 14.4 (Assignment), Section 14.5 (Performance by Affiliates), Section 14.6 (Further Actions), Section 14.7 (Severability), Section 14.8 (No Waiver), Section 14.9 (Independent Contractors), Section 14.10 (Governing Law) and Section 14.11 (Construction of this Agreement).

8.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which shall constitute together the same document. Counterparts may be signed and delivered by facsimile, or electronically in PDF format, each of which shall be binding when sent.

[Signature page follows.]

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals by their proper officers as of the Effective Date.

Artiva Biotherapeutics, Inc.

By: /s/ Thomas Farrell

Title: President & CEO

Date: 21 Nov 19

Green Cross LabCell Corporation

By: /s/ Dae-Woo Park

Title: CEO

Date: 21 Nov 19

Exhibit 1.10

Product

Product	Description
AB-101 (CBNK)	***

Exhibit 1.12
Product Patents

[**]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.**

SELECTED PRODUCT LICENSE AGREEMENT (AB-201)

THIS SELECTED PRODUCT LICENSE AGREEMENT (the “**Agreement**”) is made and entered into as of September 29, 2020 (the “**Effective Date**”) by and between **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Artiva**”), having a place of business at 4747 Executive Drive, Suite 1150, San Diego, CA 92121, USA, and **GREEN CROSS LABCELL CORPORATION**, a Korean corporation (“**GCLC**”), with its principal place of business at 107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 446-850, 16924, Republic of Korea. Artiva and GCLC are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties**”.

RECITALS

A. The Parties have previously entered into that certain Option and License Agreement, dated as of September 4, 2019 (as may be amended, the “**Option Agreement**”), pursuant to which, among other things, GCLC has granted to Artiva an exclusive option to obtain an exclusive license under Selected Product Technology to develop, manufacture and commercialize Selected Products in the Field in the Territory (each term as defined in the Option Agreement) (the “**Option**”).

B. Artiva has exercised its Option with respect to the Product in accordance with the terms and conditions of the Option Agreement, and GCLC has granted to Artiva the Selected Product License (as defined in the Option Agreement) as to the Product.

C. In accordance with Section 5.3 of the Option Agreement, the Parties desire to enter into this Agreement to set forth additional terms and conditions of the Selected Product License as to the Product.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises, covenants and conditions contained in this Agreement, the Parties agree as follows:

1. DEFINITIONS

Capitalized terms used in this Agreement (other than the headings of the Sections or Articles) have the following meanings set forth in this Article 1, or, if not listed in this Article 1, the meanings as designated in the text of this Agreement. Capitalized terms used in this Agreement but not otherwise defined herein shall have such meanings ascribed to them in the Option Agreement.

1.1 “Combination Product” means any combination of the Product with one (1) or more other active ingredients, products or services that is not the Product, where such products are sold either as a fixed dose/unit or as separate doses/units in a single package for a single price.

1.2 “Existing Third Party Agreements” means the following Agreements to which GCLC is a party with the following Third Parties that relate to NK Cells, Licensed Products or Information or Patents related to NK Cells or Licensed Products: [***].

1.3 “GCLC Subsidiary” means any Affiliate of GCLC that is directly controlled by GCLC, or over which GCLC has the power to direct or cause the direction of the management and

policies of such entity, whether by the ownership of at least fifty percent (50%) of the voting stock of such entity, or by contract.

1.4 “IND” shall mean an investigational new drug application, clinical trial application, clinical trial exemption, or similar application or submission filed with or submitted to a Regulatory Authority in a jurisdiction that is necessary to commence human clinical trials in such jurisdiction, including any such application filed with the FDA pursuant to 21 C.F.R. Part 312.

1.5 “IND Acceptance” means (a) with respect to an IND for a Product filed with the FDA, either (i) a “may proceed” letter from the FDA in writing in response to a dossier submitted to the FDA; or (ii) expiration of the thirty (30) day period following the date of submission of an IND without receipt of notice from the FDA within such time period that the IND is subject to a clinical hold, whichever event ((i) or (ii)) occurs first, or (b) equivalent authorization to proceed with respect to an IND filed with or submitted to any Regulatory Authority outside the United States.

1.6 “Indication” means [***].

1.7 “Initiation” of a clinical trial means the first dosing of the first subject enrolled in such clinical trial.

1.8 “Net Sales” means, with respect to a given period of time, the gross amount invoiced by Artiva and its Affiliates and Sublicensees (each, a “Selling Party”) to Third Party (other than any Selling Party) purchasers for the sale or distribution of Products in the Territory, less the following deductions and offsets that are actually incurred, allowed, accrued, paid or taken and are allocated with respect to such sale or distribution:

(a) [***];

(b) [***];

- (c) [***];
- (d) [***];
- (e) [***];
- (f) [***]; and
- (g) [***].

Such amounts shall be determined in accordance with GAAP.

With respect to (c) above, (i) no deductions will be made for commissions paid to individuals whether they be with independent sales agencies or regularly employed by Licensee and on its payroll, or for cost of collections, and (ii) if a Product is distributed at a discounted price that is substantially lower than the customary price charged by Licensee, or distributed for non-cash consideration (whether or not at a discount), Net Sales will be calculated based on the non-discounted amount of the Product charged to an independent Third Party during the same calendar quarter or, in the absence of such sales, on the fair market value of the Product.

Sales of Products by a Selling Party to another Selling Party for resale by such entity to a Third Party (other than a Selling Party) shall not be deemed a sale for purposes of this definition of "Net Sales," *provided* that the subsequent resale is included in the computation of Net Sales. Transfers or dispositions of Products as free promotional samples in commercially reasonable amounts, consistent with prevailing industry standards, and Products used in research, development or regulatory activities, compassionate use, indigent programs, investigator-initiated trials or on a named patient basis shall be disregarded in determining Net Sales.

If any discounts or other deductions or rebates are made in connection with sales of a Product that is bundled or sold together with other products of the Selling Parties, then the discount, deduction or rebate applied to the Product shall not exceed the discount, deduction or rebate applied to any of the other products of the Selling Parties in such arrangement based upon the respective list prices of the Product and such other products prior to applying the discount, unless Artiva provides evidence reasonably satisfactory to GCLC that such difference is commercially reasonable and does not unfairly prejudice the Product in favor of such other products.

For Products which are sold as Combination Products, the Net Sales for such Combination Products shall be adjusted by [***].

1.9 “Phase 2 Clinical Trial” means a study of a Product in human patients designed or intended to determine initial efficacy, pharmacological effect or dose range or regimen, as further defined in 21 C.F.R. 312.21(b), as amended from time to time, or the corresponding regulations in any jurisdiction or country other than the United States, or any amended or successor regulations, to permit the design of further clinical trials, including a human clinical trial that is also designed to satisfy the requirements of 21 C.F.R. 312.21(a) (or corresponding foreign regulations) and is subsequently optimized or expanded to satisfy the requirements of 21 C.F.R. 312.21(b) (or corresponding foreign regulations) or otherwise to enable a Pivotal Clinical Trial (e.g., a phase 1/2 trial) but only at the time of Initiation of the optimized or expanded portion of such trial.

1.10 “Pivotal Clinical Trial” means a pivotal study in human patients with a defined dose or a set of defined doses of the Product designed or intended to ascertain efficacy and safety of the Product for the purpose of enabling the preparation and forming the primary basis for submission of a BLA for the Product to the competent Regulatory Authority in a country of the Territory, which may be a Phase 3 study as further defined in 21 C.F.R. 312.21(c), as amended from time to time, or a Phase 2 study as further defined in 21 C.F.R. 312.21(b), as amended from time to time, or in each case defined in the corresponding regulations in any jurisdiction or country other than the United States, or any amended or successor regulations.

1.11 “Product” means the Licensed Product described in Exhibit 1.11 and any Combination Product of such Licensed Product.

1.12 “Product Know-How” means all Information Controlled by GCLC or any GCLC Subsidiary as of the Effective Date or during the Term that relate specifically to the Product or its manufacture or use (and are not otherwise included in GCLC Core Technology). Product Know-How excludes any Additional Joint Inventions.

1.13 “Product Patents” means any Patents in the Territory Controlled by GCLC or any GCLC Subsidiary as of the Effective Date or during the Term that relate specifically to a Product or its manufacture or use (and are not otherwise included in GCLC Core Technology). Exhibit 1.13 sets forth the Product Patents existing on the Effective Date. Exhibit 1.13 may be

updated from time-to-time during the Term upon the mutual written agreement of the Parties. Product Patents excludes any Additional Joint Patents.

1.14 “Product Technology” means the Product Know-How and Product Patents.

1.15 “Sublicensee” means a Third Party to whom Artiva grants a sublicense under some or all of the rights granted to Artiva pursuant to any Product License, beyond the mere right to purchase Products from or to provide services on behalf of Artiva and its Affiliates. In no event shall GCLC or any of its Affiliates be deemed a Sublicensee.

1.16 “Territory” means all countries in the world, excluding Asia, Australia and New Zealand.

1.17 Additional Definitions. Each of the following definitions is set forth in the section of the Agreement indicated below:

Definition	Section
***]	3.2(d)
Additional Joint Inventions	4.1
Additional Joint Patents	4.1
Agreement	Preamble
Artiva	Preamble
Artiva Indemnitees	7.1(b)
Claims	7.1(a)
Effective Date	Preamble
GCLC	Preamble
GCLC Indemnitees	7.1(a)
Indemnified Party	7.1(c)
Indemnifying Party	7.1(c)
Parties/Party	Preamble
Product Royalties	3.2(a)
Product Royalty Term	3.2(b)
Product License	2.1
Selling Party	1.8
Term	5.1
Third Party License	3.2(e)(ii)

2. LICENSES AND RELATED RIGHTS

2.1 License Grant. Subject to the terms and conditions of this Agreement, GCLC hereby grants Artiva during the Term an exclusive (even as to GCLC and GCLC Subsidiaries), royalty-bearing license, with the right to sublicense through multiple tiers as provided in Section 2.2, under the Product Technology, and GCLC’s interest in Additional Joint Inventions

and Additional Joint Patents, to research, develop, make, have made, use, offer for sale, sell and import Products in the Field and in the Territory (the “Product License”).

2.2 Sublicensing; Subcontracting. Artiva shall have the right to grant sublicenses of rights granted under the Product License, or subcontract its activities with respect to any Product, to its Affiliates, contractors and any other Third Party, *provided* that: (a) Artiva shall remain responsible for the performance or failure to perform by any such Affiliate, Sublicensee and subcontractor under their respective sublicensed or subcontracted rights or obligations to the same extent as if such activity were performed (or was failed to be performed) by Artiva; and (b) each such sublicense and subcontract agreement shall be consistent with the terms and conditions of this Agreement. Artiva shall provide GCLC with a copy of any sublicense agreement entered into with a Sublicensee, and any amendment thereto, within thirty (30) days of its execution (*provided* that Artiva may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement). Artiva shall provide GCLC with a list of any subcontract agreements entered into with a subcontractor for contract research or contract manufacturing services in a calendar quarter within [***] days of the end of such calendar quarter, and if requested by GCLC within ten (10) days of GCLC’s receipt of such list, provide GCLC with a copy of any such subcontract agreement (*provided* that Artiva may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement).

2.3 Reserved Rights. GCLC hereby expressly reserves all rights, interests and benefits not expressly granted to Artiva herein, including, without limitation, (a) all rights to practice, and to grant licenses under, the Product Technology and GCLC’s interest in Additional Joint Inventions and Additional Joint Patents outside the Territory, and (b) the right to conduct research and development to be conducted by GCLC or any GCLC Affiliate as contemplated by this Agreement and any services or manufacturing agreements entered into between GCLC or any GCLC Affiliate and Artiva.

2.4 Negative Covenant. Artiva covenants that it will not and will not permit any of its Affiliates, Sublicensees or subcontractors to use or practice any Product Technology or GCLC’s interest in Additional Joint Inventions and Additional Joint Patents outside the scope of the Product License. GCLC covenants that it will not and will not permit any of its Affiliates, or grant the right to or assist or collaborate with any Third Party, to directly or indirectly during the Term research, develop, make, have made, use, offer for sale, sell and import any Product in the Field in the Territory, except as expressly authorized in this Agreement.

2.5 No Implied Licenses. Except as explicitly set forth in this Agreement, any other Selected Product License Agreement(s) and the Option Agreement, neither Party shall be deemed by estoppel or implication to have granted the other Party any license or other right to any intellectual property of such Party.

2.6 Disclosure of Product Know-How. Within [***] days after the Effective Date, GCLC shall disclose to Artiva the Product Know-How existing as of the Effective Date. In addition, GCLC shall disclose to Artiva any Product Know-How as it pertains specifically to the Product that comes into existence after the Effective Date and was not previously provided to Artiva promptly after the development thereof (and at least every [***] months). During the Term, GCLC shall make available to Artiva, on a reasonable consultation basis, such advice of its

technical personnel as may be reasonably requested by Artiva in connection with such transfer of Product Know-How.

2.7 Development Option. If GCLC desires to pursue development of a Product in combination with an antigen-specific therapy that Artiva has determined not to pursue, the Parties shall discuss in good faith and agree on a co-development arrangement for such Product in combination with antigen-specific therapy in mutually agreed Indications in the Territory, which shall not overlap with Indications for which Artiva is developing a Product.

3. COMPENSATION

3.1 Initial Payment. Within (a) [***] days after [***], or (b) [***] days after the Effective Date, whichever is later, Artiva shall pay to GCLC a one-time upfront payment of [***] which represents [***].

3.2 Product License Royalty Payments.

(a) Product License Royalty Rates. Artiva shall pay to GCLC royalties on Net Sales of Products, the manufacture, use or sale of which are claimed by or use any Product Technology, on a country-by-country and Product-by-Product basis during the Product Royalty Term, as calculated by multiplying the applicable portion of aggregate Net Sales of the Product in the Territory by the corresponding royalty rate, as set forth in the table below, subject to the applicable adjustments in accordance with Section 3.2(e) below (the “**Product Royalties**”).

<u>Annual Net Sales of the Product in the Territory</u>	<u>Royalty Rate</u>
For that portion of annual aggregate Net Sales of the Product less than or equal to \$[***]	[***]
For that portion of annual aggregate Net Sales of the Product greater than [***]	[***]

(b) Product Royalty Term. Royalties payable under Section 3.2(a) shall be payable on a Product-by-Product and country-by-country basis in the Territory during the period commencing on the First Commercial Sale of such Product in such country in the Territory and continuing until the later of (i) expiration of the last-to-expire Valid Claim of the Product Patents in the country of sale claiming such Product or the manufacture or use of such Product; (ii) expiration of any Regulatory Exclusivity for such Product in such country; and (iii) the tenth (10th) anniversary of the First Commercial Sale of such Product in such country (the “**Product Royalty Term**”). Following expiration of the Product Royalty Term for any Product in a given country, no further Product Royalties shall be payable for such Product in such country, and the Product License granted to Artiva under Section 2.1 with respect to such Product in such country

shall automatically become fully paid-up, perpetual and royalty-free and shall survive any expiration or termination of this Agreement.

(c) Royalty Reports and Payments. Within [***] days following the end of each calendar quarter following the First Commercial Sale of a Product upon which Product Royalties are payable anywhere in the Territory, Artiva shall provide GCLC with a report containing the following information for the applicable calendar quarter, on a Product-by-Product and country-by-country basis: (i) Net Sales of such Product in such country; (ii) the basis for any adjustments to royalties due to GCLC on account of Net Sales of such Product in such country; (iii) a calculation of the royalty payment due to GCLC on account of Net Sales of such Product in such country; and (iv) the exchange rate used in calculating any of the foregoing; *provided* that the obligations under this Section 3.2(c) may be satisfied by the report due by Artiva to GCLC under Section 6.1(c) of the Option Agreement. Concurrent with the delivery of the applicable quarterly report, Artiva shall pay the royalty payment due to GCLC pursuant to this Section 3.2 for such calendar quarter.

(d) Existing Third Party Payment Obligations. GCLC shall be responsible for any payments to any Affiliates or Third Parties for Patents or Information licensed or acquired by GCLC prior to the Effective Date which are included in the Product Technology, including any payments under that certain [***].

(e) Royalty Adjustments. Product Royalties shall be subject to adjustment as a result of the events set forth below.

(i) No Valid Claim. During any part of the Product Royalty Term for a Product in which there is no Valid Claim of either the GCLC Core Patents or the Product Patents in the country of sale claiming such Product or the manufacture, use or sale of such Product in such country, the Product Royalties shall be reduced by [***] which reduction will be calculated by determining the portion of total Net Sales of the relevant Product in a calendar quarter that is attributable to the country in which such reduction applies, and determining the total Product Royalties for such Product without reduction, and then reducing by [***] the applicable portion (based on Net Sales of such Product in such country as a percentage of total Net Sales of such Product) of total Product Royalties attributable to such Product in such country.

(ii) Third Party Royalty Credit. If Artiva or any of its Affiliates or Sublicensees obtains a license or sublicense from any Third Party under any intellectual property that is necessary in order to manufacture, use, sell, offer for sale or import a Product in the Territory (including any license by a Third Party to Artiva or sublicense by GCLC to Artiva described in Section 5.4(e) of the Option Agreement, but excluding any license or sublicense to Artiva under an Existing Third Party Agreement as provided in Section 5.4(d) of the Option Agreement) (each a **“Third Party License”**), and GCLC agrees that such Third Party License is necessary to manufacture, use, sell, offer for sale or import such Product in the Territory, such agreement not to be unreasonably withheld, then Artiva may deduct [***] of any royalty (or comparable payment based on sales of such Product) payable by Artiva or its Affiliate or Sublicensee in any calendar quarter in consideration for such Third Party License from the Product Royalties that would otherwise be due in any calendar quarter for such Product. Any amount paid

to such Third Party which is entitled to be deducted under this Section 3.2(e)(ii) but is not deducted as a result of the limitation set forth in Section 3.2(e)(iv) shall be carried over and applied against Product Royalties payable to GCLC in respect of such Product in such country in subsequent calendar quarters until the full deduction is taken. In no event may Artiva credit payments under a Third Party License to reduce the Product Royalties with respect to a Product under this Section 3.2(e)(ii) and also to reduce the Core IP Royalties payable with respect to the same Product that is a Licensed Product under the Option Agreement.

(iii) Biosimilar Reduction. If a Biosimilar Product to a Product is sold in any country in the Territory during the Product Royalty Term for such Product and country, the Product Royalties payable with respect to such Product in such country will be reduced by [***] for the remainder of such Product Royalty Term.

(iv) Limitation. The total deductions under Sections 3.2(e)(ii) and (iii) shall not reduce the Product Royalties payable to GCLC under Section 3.2 (as reduced under Section 3.2(e)(i), if applicable) with respect to a Product in a given country in any calendar quarter by more than [***]. In no event will the Product Royalties be reduced for any reason whatsoever other than as provided in this Section 3.2(e).

3.3 Milestone Payments.

(a) Development Milestone Payments. Artiva shall make the following non-refundable and non-creditable development milestone payments to GCLC within [***] days after the first achievement of each applicable milestone event with respect to a Product by Artiva or its Affiliates or Sublicensees. Each such milestone payment shall be paid only once during the Term, the first time a Product reaches such milestone event and regardless of the number of times such milestone event is reached for a Product and of the number of subsequent Products reaching such milestone event. For clarification, the total milestone payments payable hereunder if all milestone events are achieved is [***].

No.	Milestone Event	Milestone Payment
1	[***]	[***]
2	[***]	[***]
3	[***]	[***]
4	[***]	[***]
5	[***]	[***]
6	[***]	[***]

7	***	***
8	***	***
9	***	***
10	***	***
11	***	***
12	***	***

(b) Sales Milestone Payments. Artiva shall make the following one-time, non-refundable and non-creditable sales milestone payments to GCLC when the aggregate annual Net Sales of Products in the Territory first reach the thresholds specified below. Artiva shall notify GCLC promptly of the achievement of each such sales threshold. Each sales milestone payment shall be made by Artiva within *** days after the end of the calendar quarter in which such sales threshold is achieved. To the extent more than one sales threshold is reached in any given calendar year, then the applicable milestone payment for each such achievement shall be due and owing with respect to such calendar year. For clarification, the total milestone payments payable hereunder if all milestone events are achieved is ***.

<u>Milestone</u>	<u>Milestone Payment</u>
Territory-wide Net Sales of Products in a calendar year of at least ***	***
Territory-wide Net Sales of Products in a calendar year of at least ***	***
Territory-wide Net Sales of Products in a calendar year of at least ***	***

3.4 Payment Method; Currency. All payments due under this Agreement to GCLC shall be made by bank wire transfer in immediately available funds to an account designated by GCLC. All payments hereunder shall be made in Dollars. When conversion of payments from any currency other than Dollars is required, such conversion shall be at an exchange rate equal to the weighted average of the rates of exchange for the currency of the country from which such payments are payable as published by *The Wall Street Journal*, Western U.S. Edition, during the calendar quarter in which the applicable sales were made.

3.5 Records; Inspection. Artiva shall, and shall cause its Affiliates and Sublicensees to, keep complete, true and accurate books of account and records for the purpose of determining the payments to be made under this Agreement. Such books and records shall be kept for [***] years following the end of the calendar year to which they pertain. Such records shall be open for inspection during such period by independent accountants, solely for the purpose of verifying payment statements hereunder for a period covering not more than [***] months prior to the date of request; *provided* that no period shall be subject to inspection under this section more than once and inspections with respect to payments on a Product under this Agreement shall be done concurrently with respect to payments on the same Product under the Option Agreement to avoid duplication. Such inspections shall be made no more than once each calendar year, on reasonable notice during normal business hours. The independent accountants will execute a reasonable written confidentiality agreement with Artiva and will disclose to GCLC only such information as is reasonably necessary to provide GCLC with information regarding any actual or potential discrepancies between amounts reported and actually paid and amounts payable under this Agreement. The auditor will send a copy of the report to Artiva at the same time it is sent to GCLC. The report sent to both Parties will include the methodology and calculations used to determine the results. Any unpaid amounts that are discovered shall be paid promptly by Artiva. Inspections conducted under this Section 3.5 shall be at the expense of GCLC, unless the inspection discloses an underpayment by Artiva of [***] or more of the amount due for any period covered by the inspection, whereupon all costs relating to the inspection for such period shall be paid promptly by Artiva. If the inspection discloses an overpayment by Artiva, then Artiva will deduct the amount of such overpayment from amounts otherwise owed to GCLC under this Agreement, unless no further payments are due hereunder, in which case the amount of such overpayment shall be refunded by GCLC to Artiva.

3.6 Income Tax Withholding. Except as otherwise provided herein, GCLC will pay any and all taxes levied on account of any payments made to it under this Agreement. GCLC shall be responsible for any transfer, documentary, sales use, stamp, registration, value added or other similar tax (“**Transfer Tax**”) that is imposed with respect to the payments or the related transfer of rights or other property pursuant to the terms of this Agreement. If any taxes are required to be withheld by Artiva from any payment made to GCLC under this Agreement (“**Withholding Taxes**”), Artiva shall (a) deduct such Withholding Taxes from the payment made to GCLC, (b) timely pay the Withholding Taxes to the proper taxing authority, and (c) send proof of payment to GCLC and certify its receipt by the taxing authority within [***] days following such payment and all such Withholding Taxes shall be treated for all purposes under this Agreement as having been paid to GCLC. To extent Artiva fails to withhold Withholding Taxes from, or apply and pay Transfer Taxes with respect to, any payment to GCLC and it is determined that Artiva should have withheld Withholding Taxes or applied and paid Transfer Taxes, GCLC agrees to indemnify and/or reimburse Artiva for any Withholding Taxes or Transfer Taxes, along with penalties and interest as applicable.

3.7 Tax Documentation. GCLC has provided a properly completed and duly executed IRS Form W-8BEN-E to Artiva. Prior to the receipt of any payment under this Agreement, GCLC (and any other recipient of payments by Artiva under this Agreement) shall, to the extent it is legally permitted to, provide to Artiva, at the time or times reasonably requested by Artiva or as required by applicable Law, such properly completed and duly executed IRS Forms W-8 or W-9 claiming the benefits of an applicable tax treaty in the case of IRS Form W-8BEN-E. Such tax

forms will, if applicable and legally permissible, claim the benefits of an applicable tax treaty to permit payments made under this Agreement to be made without, or at a reduced rate of, withholding for taxes.

4. INTELLECTUAL PROPERTY

4.1 Ownership. All Information, discoveries and inventions (patentable or not) generated, conceived or reduced to practice in the performance of the research, development, commercialization or other activities contemplated by this Agreement, including all intellectual property rights therein, shall be as follows: (a) Artiva shall own all Information, discoveries and inventions made solely by employees, agents or independent contractors of Artiva and all intellectual property rights therein, (b) GCLC shall own all Information, discoveries and inventions made solely by employees, agents or independent contractors of GCLC and all intellectual property rights therein, and (c) the Parties shall jointly own all Information, discoveries and inventions made jointly by employees, agents or independent contractors of each Party ("**Additional Joint Inventions**") and all intellectual property rights therein. All Patents claiming Joint Inventions shall be referred to herein as "**Additional Joint Patents**". Subject to the rights and licenses granted under this Agreement, any other Selected Product License Agreement and the Option Agreement, each Party shall be entitled to practice, grant licenses to, assign and exploit the Additional Joint Inventions and Additional Joint Patents without the duty of accounting or seeking consent from the other Party within the Party's respective territory.

4.2 Patent Prosecution.

(a) Product Patents. Artiva shall have the first right, but not the obligation, at Artiva's expense, to control the preparation, filing, prosecution (including any interferences, re-issue proceedings and re-examinations) and maintenance of the Product Patents in the Territory. Artiva shall keep GCLC reasonably informed of progress with regard to the preparation, filing, prosecution and maintenance of Product Patents in the Territory, including the countries in the Territory in which it intends to file, maintain or abandon a given Product Patent. Artiva will notify GCLC of all warning letters, conflict proceedings, re-examinations, re-issuance, oppositions, revocation proceedings or any other material challenge relating to a given Product Patent in the Territory. Artiva will consult with, and consider in good faith the requests and suggestions of, GCLC with respect to strategies for filing and prosecuting such Product Patents in the Territory. In the event that Artiva desires to abandon or cease prosecution or maintenance of any Product Patent in the Territory, Artiva shall provide reasonable prior written notice to GCLC of such intention (which notice shall, in any event, be given no later than [***] days prior to the next deadline for any action that may be taken with respect to such Product Patent in the Territory with the applicable patent office), and upon GCLC's written election provided no later than [***] days after such notice from Artiva, Artiva shall continue prosecution or maintenance of such Product Patent at GCLC's direction and expense. If GCLC does not provide such election within [***] days after such notice from Artiva, Artiva may continue prosecution and maintenance of such Product Patent in the Territory or discontinue prosecution and maintenance of such Product Patent in the Territory. GCLC shall have the sole right, but not the obligation, at GCLC's expense, to control the preparation, filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of the Product Patents outside the Territory. GCLC shall keep Artiva reasonably informed of progress with regard to the preparation, filing, prosecution and

maintenance of Product Patents outside the Territory to the extent such activities could affect the Product Patents in the Territory.

(b) Additional Joint Patents. Additional Joint Patents shall be governed by Section 4.2(a).

(c) Cooperation. Promptly following the Effective Date, (but no less than [***] days before any statutory bar date), GCLC will transfer to Artiva all Information concerning the Product Patents in the Territory. GCLC shall cooperate with Artiva and shall execute any power of attorney or similar document, in each case to the extent reasonably required to allow Artiva to assume the preparation, filing, prosecution and maintenance in the Territory of the Product Patents in Artiva's name. Artiva shall cooperate with GCLC, in each case to the extent reasonably required to allow GCLC to assume the preparation, filing, prosecution and maintenance, of any Patent abandoned by Artiva pursuant to Section 4.2(a).

4.3 Patent Enforcement.

(a) Notification. If either Party becomes aware of any existing or threatened infringement of the Product Patents, Additional Joint Patents or Product Technology related to any Existing Third Party Agreements, or the filing of a BLA by a Third Party for a product that names a Product as a reference product (or similar filing in a country other than the U.S.), it shall promptly notify the other Party in writing to that effect, and the Parties will consult with each other regarding any actions to be taken with respect to such infringement.

(b) Right to Enforce. Artiva shall have the first right, but shall not be obligated, to bring and control an infringement action with respect to any Product Patent or Additional Joint Patent in the Territory against any person or entity, at Artiva's sole cost and expense. If Artiva does not bring such an action with respect to a Product Patent or Additional Joint Patent in the Territory (or settle or otherwise secure the abatement of such infringement) prior to the earlier of: (i) [***] days following Artiva's receipt or delivery of the notice under Section 4.3(a), or (ii) [***] days before the deadline, if any, set forth in the applicable Laws for the filing of such actions, GCLC shall have the right to bring and control any such action, at its own expense and by counsel of its own choice. Unless otherwise agreed by the Parties, the Parties shall jointly bring and control an infringement action with respect to any Product Technology that is related to the [***], and equally bear the related expense.

(c) Cooperation. Each Party shall cooperate fully with the enforcing Party in such enforcement, at such enforcing Party's request and expense, including joining such action as a party plaintiff if required by applicable Laws to pursue such action. The enforcing Party shall keep the other Party regularly informed of the status and progress of such enforcement efforts, shall reasonably consider the other Party's comments on any such efforts. The non-enforcing Party shall be entitled to separate representation in such matter by counsel of its own choice and at its own expense, but such Party shall at all times cooperate fully with the enforcing Party. Neither Party shall have the right to settle any patent infringement litigation under this Section 4.3 in a manner that diminishes the rights or interests of the other Party without the prior written consent of such other Party, such consent not to be unreasonably withheld or delayed.

(d) Expenses and Recoveries. The enforcing Party bringing a claim, suit or action under this Section 4.3 shall be solely responsible for any expenses incurred by such Party as a result of such claim, suit or action. If such Party recovers monetary damages in such claim, suit or action, except as otherwise agreed by the Parties in connection with a cost-sharing arrangement, such recovery shall be allocated first to the reimbursement of any expenses incurred by the Parties in such litigation, and any remaining amounts shall be shared as follows: [***].

(e) Enforcement Outside the Territory. GCLC shall have the sole right, but shall not be obligated, to bring and control an infringement action with respect to any Product Patent or Additional Joint Patent outside the Territory against any person or entity, at GCLC's sole cost and expense. GCLC shall keep Artiva reasonably informed of the enforcement of Product Patents or Additional Joint Patents outside the Territory to the extent such activities could affect the Product Patents or Additional Joint Patents in the Territory.

4.4 Patent Oppositions and Other Proceedings.

(a) In the Territory. If a Product Patent or Additional Joint Patent in the Territory becomes the subject of any proceeding commenced by a Third Party in connection with an opposition, action for declaratory judgment, nullity action, interference or other attack upon the validity, title or enforceability thereof, then Artiva shall have the first right, but not the obligation, to control such defense at its own expense using counsel of its own choice. If Artiva decides that it does not wish to defend against such action, it shall notify GCLC reasonably in advance of all applicable deadlines, and GCLC shall thereafter have the right, but not the obligation, to assume defense of such action at its own expense. Unless otherwise agreed by the Parties, the Parties shall jointly control the defense of any proceeding commenced by a Third Party in connection with an opposition, action for declaratory judgment, nullity action, interference or other attack upon the validity, title or enforceability of any Product Technology that is related to the AbClon Agreement, and each Party shall equally bear the related expense.

(b) The Party controlling any defense under Section 4.4(a) shall permit the non-controlling Party to participate in the proceedings to the extent permissible under applicable Laws and to be represented by its own counsel at the non-controlling Party's expense. Notwithstanding any of the foregoing, the Party controlling any enforcement action pursuant to Section 4.3 shall also have the sole right to control the response to any attack on the validity, title, or enforceability of a Patent that is asserted by the alleged infringer(s) as a counterclaim or affirmative defense in such action. Neither Party shall have the right to settle any proceeding under this Section 4.4 in a manner that diminishes the rights or interests of the other Party without the prior written consent of such other Party, such consent not to be unreasonably withheld or delayed.

(c) Outside the Territory. GCLC shall have the sole right, but shall not be obligated, to control any opposition, action for declaratory judgment, nullity action, interference or other attack upon the validity, title or enforceability of any Product Patent or Additional Joint Patent outside the Territory, at GCLC's own expense using counsel of its own choice. GCLC shall

keep Artiva reasonably informed of any such defense of Product Patents or Additional Joint Patents outside the Territory to the extent such activities could affect the Product Patents or Additional Joint Patents in the Territory.

4.5 Patent Marking. Artiva shall mark Product (or when the character of the product precludes marking, the package containing any such Product) marketed and sold by Artiva or its Affiliates or Sublicensees in accordance with all applicable Laws relating to patent marking.

4.6 Infringement of Third Party Rights. If any Product used or sold by Artiva or its Affiliates or Sublicensees becomes the subject of a Third Party's claim or assertion of infringement of a Patent, each Party shall promptly notify the other Party. Neither Party shall have the right to settle any patent infringement litigation under this Section 4.6 in a manner that diminishes the rights or interests of the other Party without the written consent of such other Party (which shall not be unreasonably withheld).

5. TERM AND TERMINATION

5.1 Term. This Agreement shall become effective on the Effective Date and, unless earlier terminated pursuant to this Article 5, shall remain in effect until the expiration of the last Product Royalty Term in the Territory (the "**Term**").

5.2 Termination for Material Breach. Each Party shall have the right to terminate this Agreement in its entirety immediately upon written notice to the other Party if the other Party materially breaches its obligations under this Agreement and, after receiving written notice identifying such material breach in reasonable detail, fails to cure such material breach within sixty (60) days from the date of such notice (or within thirty (30) days from the date of such notice in the event such material breach is solely based on the breaching Party's failure to pay any amounts due hereunder); *provided, however*, in the case of a breach or violation that cannot be cured within such sixty (60) day period, the non-breaching Party may terminate this Agreement following such sixty (60) day period only if the breaching Party shall have failed to commence substantial remedial actions within such sixty (60) day period and to use reasonable efforts to pursue the same. Any right to terminate under this Section 5.2 shall be stayed and the cure period tolled in the event that, during any cure period, the breaching Party shall have initiated dispute resolution in accordance with Article 13 of the Option Agreement with respect to the alleged breach, which stay and tolling shall last so long as the breaching Party diligently and in good faith cooperates in the prompt resolution of such dispute resolution proceedings. Each Party shall be entitled to offset, against amounts payable to the other Party under this Agreement, any amounts of damages determined, in a final decision by the applicable court action or other legal proceeding, to be owed to such Party by the other Party based on the other Party's material breach of this Agreement.

5.3 Termination Upon Insolvency. Either Party may terminate this Agreement upon written notice to the other Party, if, at any time, the other Party (a) files in any court or agency pursuant to any statute or regulation of any state, country or jurisdiction, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of such other Party or of its assets, (b) is served with an involuntary petition against it, filed in any insolvency proceeding that is not dismissed within ninety (90) days after the filing thereof,

or (c) makes an assignment of the assets associated with this Agreement for the benefit of its creditors.

5.4 Termination by Artiva. Artiva may terminate this Agreement in its entirety without cause upon ninety (90) days prior written notice to GCLC.

5.5 Effects of Expiration or Termination of this Agreement. Upon any expiration or termination of this Agreement, all rights and obligations of the Parties shall terminate entirely, except as provided in this Section 5.5 and Section 5.7 and the sections referenced therein and:

(a) **Termination of License to Artiva.** All rights and licenses granted to Artiva hereunder shall terminate, except for any and all licenses that survive expiration or termination in accordance with the last sentence of Section 3.2(b); *provided* that if this Agreement is terminated by GCLC pursuant to Section 5.2 or 5.3, any sublicense granted to a Sublicensee that is not in breach under the applicable sublicense (and whose actions or omissions did not result in a breach by Artiva giving rise to GCLC's right of termination) will continue as a direct license from GCLC so long as the Sublicensee makes all payments to GCLC required under Section 3.2 and Section 3.3.

(b) **Remaining Inventories.** Artiva or its Affiliates, to the extent that such parties continue to have stocks of usable Products that would be subject to payment of Product Royalties pursuant to Section 3.2, may continue to fulfill orders received for Products until [***] months following the date of termination. For Products sold by Artiva or its Affiliates after the effective date of a termination, Artiva shall continue to pay Product Royalties pursuant to Section 3.2, as applicable.

(c) **Additional Effects of Termination.** Upon any termination of this Agreement, except termination of this Agreement by Artiva under Section 5.2, effective as of such termination, Artiva shall promptly (A) assign and transfer (or cause to be assigned and transferred) to GCLC or its designee (and provide copies of) all Regulatory Materials and Regulatory Approvals held in the name of Artiva, or any Affiliate it controls (within the meaning of Section 1.1 of the Option Agreement), relating to any Product, including related correspondence with Regulatory Authorities and (B) disclose to GCLC, and grant to GCLC a Right of Reference and Use (as that term is defined in 21 C.F.R. § 314.3(b) or any non-United States equivalent) with respect to, all pre-clinical and clinical data, including pharmacology and biology data, in Artiva's or its applicable controlled Affiliates' Control with respect to any Product.

5.6 Damages; Relief. Termination of this Agreement shall not preclude either Party from claiming any other damages, compensation or relief that it may be entitled to upon such termination.

5.7 Survival. Termination or expiration of this Agreement shall not affect any rights or obligations of the Parties under this Agreement that have accrued prior to the date of termination or expiration (including any rights or obligations with respect to payments due and owing prior to the date of termination or expiration). Notwithstanding anything to the contrary, the following provisions shall survive any expiration or termination of this Agreement: Articles 1 and 8 and Sections 2.5, 3.2(b) (final sentence only), 3.5 (for the term stated therein), 4.1, 5.5, 5.6, 5.7, 5.8,

6.5, 7.1, 7.2 and 7.3 (for [***] years), as well as Article 1 (Definitions) to the extent necessary to give meaning to terms defined therein, Articles 9 and 13 and Sections 14.2 through Section 14.11 of the Option Agreement as applied to this Agreement pursuant to Section 8.2.

5.8 Rights under Bankruptcy or Insolvency Laws. All rights and licenses granted under or pursuant to this Agreement by one Party to the other Party are, and will otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws, licenses of right to “intellectual property” as defined under Section 101 of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws. The Parties agree that a Party that is a licensee of such rights under this Agreement will retain and may fully exercise all of its rights and elections under the provisions of applicable bankruptcy or insolvency laws. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party to this Agreement under the provisions of applicable bankruptcy or insolvency laws, the other Party will be entitled to a complete duplicate of (or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property, and same, if not already in its possession, will be promptly delivered to it (a) upon any such commencement of a bankruptcy or insolvency proceeding upon its written request therefor, unless the bankrupt Party elects to continue to perform all of its obligations under this Agreement, or (b) if not delivered pursuant to clause (a) above, following the rejection of this Agreement by or on behalf of the bankrupt Party upon written request therefor by the other Party.

6. REPRESENTATIONS AND WARRANTIES AND COVENANTS

6.1 Mutual Representations and Warranties. Each Party hereby represents and warrants to the other Party as follows:

(a) Corporate Existence. As of the Effective Date, it is a company or corporation duly organized, validly existing, and in good standing under the Laws of the jurisdiction in which it is incorporated.

(b) Corporate Power, Authority and Binding Agreement. As of the Effective Date, (i) it has the corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder; (ii) it has taken all necessary corporate action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder; and (iii) this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, and binding obligation of such Party that is enforceable against it in accordance with its terms.

(c) No Conflicts. The execution and delivery of this Agreement, and the performance by such Party of its obligations under this Agreement, including the grant of rights and licenses to the other Party pursuant to this Agreement, does not and will not: (i) conflict with, nor result in any violation of or default under, any instrument, judgment, order, writ, decree, contract or provision to which such Party is bound; (ii) give rise to the suspension, revocation, impairment, forfeiture or non-renewal of any material permit, license, authorization or approval that applies to such Party, its business or operations or any of its assets or properties; or (iii) conflict

with any rights granted by such Party to any Third Party or breach any obligation that such Party has to any Third Party.

6.2 GCLC Representations and Warranties. GCLC represents and warrants to Artiva as of the Effective Date that:

(a) GCLC is the sole and exclusive owner of the Patents set forth on Exhibit 1.13, in each case free and clear of all liens, and GCLC has the right to grant the licenses, sublicenses and other rights with respect to the Product Patents that it purports to grant hereunder. Exhibit 1.13 is a true and complete list of all Patents Controlled by GCLC or any GCLC Subsidiary as of the Effective Date that relate specifically to a Product or its manufacture or use (other than any GCLC Core Patents). All official fees, maintenance fees and annuities for the Product Patents have been paid through the Effective Date.

(b) All issued Product Patents are in full force and effect and subsisting, and inventorship of each Patent is properly identified on such Patents. No Third Party has asserted in writing that any issued Product Patent is invalid or unenforceable. None of the Product Patents is currently involved in any interference, reissue, reexamination, or opposition proceeding, and no such proceeding is threatened to the Knowledge of GCLC. GCLC has taken reasonable security measures consistent with industry standard practices, including measures against unauthorized disclosure, to protect the secrecy and confidentiality of trade secrets within the Product Know-How. GCLC and GCLC Subsidiaries have complied with all duties of candor required by applicable Governmental Authorities in the prosecution by GCLC or any GCLC Subsidiaries of any rights in the Product Technology.

(c) GCLC (i) has provided Artiva a true and complete copy of the Existing Third Party Agreements, including any amendments thereto, and the Existing Third Party Agreements are in full force and effect in accordance with its terms; and (ii) is in compliance in all material respects with its obligations under the Existing Third Party Agreements and, to GCLC's knowledge, (A) the other parties to the Existing Third Party Agreements have not breached the Existing Third Party Agreements in any material respect, and (B) there is no basis for termination of the Existing Third Party Agreements;

(d) To GCLC's Knowledge, there are no activities by Third Parties that would constitute an infringement of the Product Patents or misappropriation of the Product Know-How.

(e) Neither GCLC nor any GCLC Subsidiary has received any written notice from any person, or have Knowledge of, any actual or threatened claim or assertion that the use or practice of the Product Technology infringes or misappropriates the intellectual property rights of a Third Party.

(f) There are no actual, pending, or alleged or threatened in writing, adverse actions, suits, claims, interferences or formal governmental investigations by or against GCLC or any GCLC Subsidiary in or before any court or Governmental Authority involving Product Technology.

(g) GCLC and GCLC Subsidiaries have complied in all material respects with all applicable Laws, including all good clinical practices, good laboratory practices and good

manufacturing practices, permits, governmental licenses, registrations, approvals, authorizations, orders, injunctions and decrees, in the research, development, manufacture and use of any Product, and neither GCLC nor any GCLC Subsidiary has received any written notice from any Governmental Authority claiming that any such activities as conducted by it are not in such compliance.

(h) All of GCLC's and GCLC Subsidiaries' employees acting on its behalf who have performed research, development, manufacturing or regulatory activities with respect to any Product are and will be obligated under a binding written agreement to comply with obligations of confidentiality and non-use no less restrictive than those set forth in Article 9 of the Option Agreement.

Notwithstanding the foregoing, any Product Patents licensed or sublicensed under the AbClon Agreement is licensed by GCLC to Artiva and its Affiliates and Sublicensees without any representations or warranties of any kind except for the following: (i) first and second sentences of Section 6.2(a), (ii) first, second and third sentences of Section 6.2(b), but in each case only to GCLC's Knowledge, and (iii) Section 6.2(c), Section 6.2(d), Section 6.2(e) and Section 6.2(f), but in each case only to GCLC's Knowledge.

6.3 Covenants. Each Party covenants to the other Party as follows:

(a) No Debarment. Neither such Party, nor, in the case of GCLC, its GCLC Subsidiaries, is debarred or disqualified under the United States Federal Food, Drug and Cosmetic Act or comparable applicable Laws in the Territory and, in the course of development, manufacturing or other activities relating to any Product, neither Party, nor, in the case of GCLC, its GCLC Subsidiaries, has used or shall use any employee, consultant or subcontractor who has been debarred or disqualified or, to such Party's Knowledge, is the subject of debarment or disqualification proceedings by a Regulatory Authority. Each Party shall notify the other Party promptly upon becoming aware that any of its or its Subsidiaries' employees, consultants or subcontractors involved in any development, manufacturing or other activities relating to any Product has been debarred or disqualified or is the subject of debarment or disqualification proceedings by any Regulatory Authority.

(b) Compliance. Both Parties and their respective Affiliates shall comply in all material respects with all applicable Laws in the development, manufacture and commercialization of any Product, in each case, to the extent applicable, including the statutes, regulations and written directives of the FDA, the EMA and any other Regulatory Authorities, the Federal Food, Drug & Cosmetic Act, as amended, the Prescription Drug Marketing Act, the Federal Health Care Programs Anti-Kickback Law, 42 U.S.C. 1320a-7b(b), the statutes, regulations and written directives of Medicare, Medicaid and all other health care programs, as defined in 42 U.S.C. § 1320a-7b(f), and the Foreign Corrupt Practices Act of 1977, each as may be amended from time to time.

(c) Employees and Subcontractors. During the Term, all employees and subcontractors of a Party or its Affiliates performing research, development, commercialization or other activities contemplated hereunder on behalf of such Party or its Affiliates shall be obligated

to undertake in writing obligations of ownership of Information, discoveries and inventions which are the same as those undertaken by the Parties pursuant to Section 4.1.

6.4 Additional GCLC Covenant. GCLC hereby covenants to Artiva that during the Term, GCLC shall not amend, modify or terminate any of the Existing Third Party Agreements in a manner that could affect Artiva, except with Artiva's prior written consent.

6.5 Disclaimer. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR NON-MISAPPROPRIATION OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS, ARE MADE OR GIVEN BY OR ON BEHALF OF A PARTY, AND ALL REPRESENTATIONS AND WARRANTIES, WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE, ARE HEREBY EXPRESSLY EXCLUDED.

7. INDEMNIFICATION AND LIMITATION OF LIABILITY

7.1 Indemnification.

(a) Indemnification by Artiva. Artiva shall defend, indemnify, and hold GCLC and its Affiliates and their respective officers, directors, employees, and agents (the "**GCLC Indemnitees**") harmless from and against any and all damages or other amounts payable by such GCLC Indemnitees, including any reasonable attorneys' fees, taxes (including penalties and interest), and costs of litigation incurred by, such GCLC Indemnitees, to the extent resulting from claims, suits, proceedings, or causes of action brought by any Third Party ("**Claims**") against such GCLC Indemnitees that arise from or are based on: (i) the development, manufacture or commercialization of any Product in the Territory, or performance of the CMC Activities, by or on behalf of Artiva or its Affiliates or Sublicensees (excluding in all cases GCLC or its Affiliates); (ii) the breach of any of Artiva's obligations under this Agreement, including Artiva's representations, warranties or covenants set forth herein; (iii) the use or application of a Third Party License in the development, manufacture, commercialization or other disposal of any Product in the Territory; or (iv) the willful misconduct or negligent acts of Artiva or any of its Affiliates or any of its or their respective officers, directors, employees or agents. The foregoing indemnity obligation shall not apply to the extent that any of the Claims arises from, is based on, or results from any activity described in Section 7.1(b)(i), (ii) or (iii) for which GCLC is obligated to indemnify the Artiva Indemnitees under Section 7.1(b).

(b) Indemnification by GCLC. GCLC shall defend, indemnify, and hold Artiva and its Affiliates and their respective officers, directors, employees, and agents (the "**Artiva Indemnitees**") harmless from and against any and all damages or other amounts payable by such GCLC Indemnitees, including any reasonable attorneys' fees, taxes (including penalties and interest), and costs of litigation incurred by such Artiva Indemnitees, to the extent resulting from Claims against such Artiva Indemnitees that arise from or are based on: (i) activities of, or on behalf of GCLC or GCLC Subsidiaries, licensee or sublicensees (other than Artiva and its Affiliates and Sublicensees) for the development, manufacture or commercialization of any Product, that give rise to a Third Party claim against an Artiva Indemnitee; (ii) the breach of any

of GCLC's obligations under this Agreement, including of GCLC's representations, warranties or covenants set forth herein; or (iii) the willful misconduct or negligent acts of GCLC or any of GCLC Subsidiaries or any of its or their respective officers, directors, employees or agents. The foregoing indemnity obligation shall not apply to the extent that any of the Claims arises from, is based on, or results from any activity set forth in Section 7.1(a)(i), (ii) or (iii) for which Artiva is obligated to indemnify the GCLC Indemnitees under Section 7.1(a).

(c) Indemnification Procedures. The Party seeking indemnification (individually, the "**Indemnified Party**"), shall promptly notify the other Party (the "**Indemnifying Party**") in writing of the Claim. Such Claim for indemnity shall indicate the nature of the Claim and the basis therefor. Promptly after a Claim is made for which the Indemnified Party seeks indemnity, the Indemnified Party shall permit the Indemnifying Party, at its option and expense, to assume the complete defense of such Claim, *provided* that (i) the Indemnified Party will have the right to participate in the defense of any such Claim at its own cost and expense, (ii) the Indemnifying Party will conduct the defense of any such Claim with due regard for the business interests and potential related liabilities of the Indemnified Party, and (iii) the Indemnifying Party will not agree to any settlement that would admit liability on the part of the Indemnified Party or involve relief other than payment of money, without the approval of the Indemnified Party, not to be unreasonably withheld; and *provided, further*, that if it is reasonably likely that the Parties may have conflicting interests or if it is otherwise not advisable under applicable legal and ethical requirements for the Indemnifying Party's defense counsel to represent both Parties, separate independent counsel shall be retained for each Party at its own expense. The Indemnifying Party will not, in defense of any such Claim, except with the consent of the Indemnified Party, consent to the entry of any judgment or enter into any settlement which does not include, as an unconditional term thereof, the giving by the claimant or plaintiff to the Indemnified Party of a release from all liability in respect thereof. After notice to the Indemnified Party of the Indemnifying Party's election to assume the defense of such Claim, the Indemnifying Party shall be liable to the Indemnified Party for such legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof at the request of the Indemnifying Party. As to those Claims with respect to which the Indemnifying Party does not elect to assume control of the defense, the Indemnified Party will afford the Indemnifying Party an opportunity to participate in such defense at the Indemnifying Party's own cost and expense, and will not settle or otherwise dispose of any of the same without the consent of the Indemnifying Party.

7.2 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 7.2 IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER SECTION 7.1 OR DAMAGES AVAILABLE FOR A PARTY'S BREACH OF CONFIDENTIALITY OBLIGATIONS IN ARTICLE 9 OF THE OPTION AGREEMENT AS APPLIED TO THIS AGREEMENT.

7.3 Insurance. Each Party shall procure and maintain insurance, including product liability insurance, with respect to its activities hereunder and which is consistent with normal business practices of prudent companies similarly situated at all times during which any Product

is being clinically tested in human subjects or commercially distributed or sold. Each Party shall provide the other Party with evidence of such insurance upon request and shall provide the other Party with written notice at least [***] days prior to the cancellation, non-renewal or material changes in such insurance. It is understood that such insurance shall not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 7.

8. MISCELLANEOUS

8.1 Entire Agreement; Amendments. This Agreement, including the Exhibits hereto, any other Selected Product License Agreements and the Option Agreement, sets forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto with respect to the subject matter hereof, and supersedes all prior agreements and understandings between the Parties with respect to the subject matter hereof. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties other than as are set forth in this Agreement. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

8.2 Inclusion of Certain Terms of the Option Agreement. Save for the extent of modification or amendment effected by this Agreement, the following terms of the Option Agreement are incorporated herein mutatis mutandis with respect to this Agreement and will continue to apply to this Agreement even if the Option Agreement expires or terminates: Article 1 (Definitions) to the extent necessary to give meaning to terms defined therein, Article 7 (Development), Article 9 (Confidentiality), Article 13 (Dispute Resolution) (except for Section 13.5), Section 14.2 (Force Majeure), Section 14.3 (Notices), Section 14.4 (Assignment), Section 14.5 (Performance by Affiliates), Section 14.6 (Further Actions), Section 14.7 (Severability), Section 14.8 (No Waiver), Section 14.9 (Independent Contractors), Section 14.10 (Governing Law) and Section 14.11 (Construction of this Agreement).

8.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which shall constitute together the same document. Counterparts may be signed and delivered by facsimile, or electronically in PDF format, each of which shall be binding when sent.

[Signature page follows.]

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals by their proper officers as of the Effective Date.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Thomas J. Farrell
Title: President & CEO
Date: 9/29/2020

GREEN CROSS LABCELL CORPORATION

By: /s/ Park Dae Woo
Title: CEO
Date: 10/8/2020

Exhibit 1.11
Product

<u>Product</u>	<u>Description</u>
AB-201	• [***] • [***]

Exhibit 1.13
Product Patents

[**]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.**

AMENDMENT TO SELECTED PRODUCT LICENSE AGREEMENT (AB-201)

This Amendment to Selected Product License Agreement (AB-201) (this “**Amendment**”), effective as of September 6, 2023, is entered into by and between **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Artiva**”), having its principal place of business at 5505 Morehouse Drive, Suite 100, San Diego, CA 92121 and **GC CELL CORPORATION**, a Korean corporation (“**GC Cell**” or “**GCLC**”) with its principal place of business at 107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 16924, Republic of South Korea.

WHEREAS, Artiva and GC Cell are party to that certain Selected Product License Agreement (AB-201) dated September 29, 2020, as amended by the Omnibus Amendment dated February 3, 2022 (the “**Agreement**”); and

WHEREAS, Artiva and GC Cell find it in their respective interests to amend certain provisions of the Agreement as set forth below.

NOW THEREFORE, for consideration duly given, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree to the following:

1. Except as expressly amended hereby, the Agreement shall continue to remain in full force and effect in accordance with its terms.
2. The Agreement is hereby amended as follows:
 - a. Section 2.6 of the Agreement is hereby amended to add the following sentence:
 “Any data generated by GCLC as part of clinical trials of the Product (“**GCLC Clinical Data**”) is part of the Product Technology licensed to Artiva as part of this Agreement and shall be regularly provided to Artiva.”
 - b. The following is newly added as Sections 2.8, 2.9, and 2.10 of the Agreement:

2.8 Grant-Back License to GCLC.

(a) License Grant. Subject to the terms and conditions of this Agreement, Artiva hereby grants to GCLC an exclusive, royalty and milestone bearing, (i) right to access and cross-reference data and information from filings made by Artiva with regulatory authorities relating to the Product in the Territory, solely to the extent necessary in connection with regulatory activities with respect to the Product outside the Territory and (ii) license to all Information and Patents Controlled by Artiva that relate specifically to, and is necessary or reasonably useful for the research, development, manufacture and use of, the Product, to research, develop, make, have made, use, offer for sale, sell and import Products in the Field outside the Territory.

(b) Royalties. GCLC shall pay to Artiva a royalty on the GCLC Net Sales of each Product on a country-by-country and Product-by-Product basis during the Product Royalty Term, as calculated by multiplying the applicable portion of GCLC Net Sales of the Product outside the Territory by the corresponding royalty rate, as set forth in the table below (“**GCLC Royalties**”).

Annual GCLC Net Sales of the Product outside the Territory	Royalty Rate
For that portion of annual aggregate GCLC Net Sales of the Product less than or equal to \$[***]	[***]%
For that portion of annual aggregate GCLC Net Sales of the Product greater than \$[***]	[***]%

The foregoing royalty shall be payable on a Product-by-Product and country-by-country basis outside the Territory during the period commencing on the First Commercial Sale of such Product in such country outside the Territory and continuing “**GCLC Net Sales**” shall mean [***].

(c) GCLC Milestones. GCLC shall make the following non-refundable and non-creditable development milestone payments to Artiva within [***] days after the first achievement of each applicable milestone event with respect to a Product by GCLC or its Affiliates or Sublicensees (provided that, activities by Artiva or its Affiliates or Sublicensees shall not be deemed to achieve such milestones) (**GCLC Milestones**). Each such milestone payment shall be paid only once during the Term, the first time a Product reaches such milestone event and regardless of the number of times such milestone event is reached for a Product and of the number of subsequent Products reaching such milestone event.

No.	Milestone Event	Milestone Payment
1	[***]	[***]
2	[***]	[***]

(d) Payments. If Artiva has not yet initiated clinical trials for the Product in the Territory when payment of GCLC Royalties or GCLC Milestone No. 2 is due, such payment shall be delayed and shall become payable upon such initiation. If GCLC Royalties or GCLC Milestones becomes payable by GCC, such payments shall be made in accordance with Sections 3.2(c), and 3.4 through 3.7 as applied to GCLC, *mutatis mutandis*.

2.9 Coordination of Development.

(a) Support for Development Outside the Territory. Artiva shall provide GCLC with technical and regulatory support for assisting GCLC's efforts in developing the Product outside the Territory as follows:

1) Assistance of up to [***] shall be provided by Artiva at no cost to GCLC. Should the actual assistance provided exceed [***], GCLC will reimburse the expenses incurred and documented in excess of [***].

2) Upon request of GCLC, the Parties shall discuss and agree upon reasonable additional support by Artiva to assist in the development of the Product outside the Territory, for which GCLC shall reimburse actual expense incurred (including for airfare, lodging, and transportation), as evidenced by documentary receipts.

3) Artiva will supply AB-201 drug product for GCLC's Phase 1 trial (up to all available vials currently owned by Artiva) for [***]/vial plus transportation and logistics reimbursed at cost, under a clinical supply agreement.

(b) Stability Program. GCLC shall provide the stability program for the Product to Artiva for [***]. Such payment shall be apportioned and invoiced at quarterly intervals as determined by the notification of each stability study records in each quarter.

(c) Governance and Coordination.

1) Similar to Artiva's Product development activities outside the Territory shall also be governed by the JDC; provided that GCLC shall be entitled to final decision-making authority with respect to development, regulatory or commercialization matters for the Product outside the Territory; provided that, should Artiva reasonably believe that any such decision would reasonably be expected to have a material adverse effect with respect to its activities in the Territory, Parties shall mutually discuss and agree on such matter. GCLC shall keep Artiva updated as to the Product development plan for outside the Territory through the JDC.

2) The Parties shall negotiate in good faith and enter into a safety data exchange agreement regarding the Product, which shall set forth standard operating procedures, governing the collection, investigation, reporting and exchange of information concerning adverse drug reactions/experiences sufficient to permit each Party to comply with its regulatory and other legal obligations within the applicable timeframes. Each Party conducting a clinical trial for the Product would maintain one or more safety database(s) in their territory. Once Artiva begins running a clinical trial for the Product, unless decided otherwise at the JDC, Artiva shall assume the role of the responsible party for the global safety database for the Product, which shall be operated with reasonable input from GCLC commensurate with the impact of the ongoing trials in each Party's respective territory.

3) The Parties shall also discuss and agree in good faith on a globally harmonized process and release assays with respect to the Product for manufacturing, clinical protocols, and other aspects that should be coordinated for safety and regulatory purposes. Once Artiva begins running a clinical trial for the Product, the JDC shall resolve any disagreements regarding the globally harmonized process and release assays, ensuring that such resolution does not result in materially adverse effects on GCLC's activities outside the Territory.

4) The Parties shall provide each other with drafts of all regulatory materials for the Product in a reasonable time prior to submission for review and comment by the other Party. Each Party shall provide the other Party with notice of any meeting or discussion with any regulatory authorities in their respective territories related to the Product, and reasonably incorporate the other Party's review.

5) Due to the importance of harmonizing translation assays (e.g., persistence) for regulatory purposes, and to take advantage of progress Artiva has already made in developing such assays with CROs, all translational assays conducted for the Product shall be based on, and consistent with, the assays established by Artiva unless GCLC reasonably believes that any such decision would reasonably be expected to have a material adverse effect with respect to its activities outside the Territory. The Parties shall jointly review and agree on such assays on a regular basis through the JDC, and Artiva shall furnish all materials and Information related to such assays to GCLC.

(d) Diligence. Artiva shall decide whether to resume development of Product in the Territory within [***] months of receiving from GCLC a clinical data package from Product clinical trials outside the Territory that meets the criteria agreed upon by the Parties prior to the submission by GCLC of the first IND outside the Territory, which shall, at the minimum, include [***]. Upon decision to resume development in the Territory, Artiva shall use Commercially Reasonable Efforts to file an IND for a sponsor initiated clinical trial acknowledged as Phase 1 or higher in the Territory (if an IND is needed to initiate such trial) within [***] months of such decision. Notwithstanding the foregoing, the foregoing obligations of Artiva may be delayed or suspended to the extent there is (i) any unresolved adverse condition or event relating to the safety or efficacy of the Product, based on feedback from Regulatory Authorities or a data monitoring committee formed to review the safety of the Product or (ii) any other delay caused by conditions that are outside the reasonable control of Artiva. The Parties agree that, (i) if Artiva is in compliance with this Section 2.9(d), Artiva shall be deemed to be using Commercially Reasonable Efforts to develop the Product in the Territory, but (ii) if Artiva is not in compliance with this Section 2.9(d), Artiva shall be deemed not to have used Commercially Reasonable Efforts to develop the Product in the Territory and thereby recognize AB-201 as a 'Retained Selected Product' subject to the Section 5.7(b) of the Option Agreement.

(e) Use of Unpublished Clinical Data. The Parties shall mutually agree as to the timing and nature of disclosure of unpublished clinical data for the Product to any Third Party, except that a Party may disclose such portion of the unpublished clinical data to the extent such disclosure is reasonably necessary in the following situations:

1) to the extent such disclosure is required to clinical sites in accordance with the applicable clinical trial agreements for the Product clinical trials outside the Territory;

2) to the extent such disclosure is required to comply with Applicable Laws or is in connection with Regulatory Materials or communications with Regulatory Authorities outside the Territory;

3) to the extent such disclosure is required to Regulatory Authorities in compliance with a Party's policies and procedures relating to pharmacovigilance and adverse event reporting for the Product; or

4) to the extent such disclosure is expressly permitted under Section 9.3 of the Option Agreement, provided that the Parties shall mutually agree on any disclosures of clinical data for filing or prosecuting Patents in accordance with Section 4.2.

2.10 Joint Opportunity Exploration.

GCLC may, on behalf of Artiva, initiate and lead business discussions with third parties for research, development, and commercialization with respect to the Product and/or Product Technology in or with respect to the Territory; provided that, GCLC shall, for each third party that it engages on behalf of Artiva, duly notify Artiva, in advance to the extent reasonably possible, of such activities and opportunities to Artiva for its review and consideration (which shall not be unreasonably withheld or delayed) after initial introductory engagements exchanging non-confidential information to explore business opportunities. Upon receipt by Artiva of such proposal for a new business opportunity from GCLC, the Parties will, in good faith, discuss how to best explore such new business opportunities or activities, including, among others, whether such opportunity should be explored solely by GCLC or together with Artiva.

3. The Parties agree to work in good faith to enter into a research services agreement and appropriate work orders thereunder to cover services provided by Artiva to GCLC. The Parties shall discuss reimbursable and non-reimbursable work items at the JRC or JDC prior to work order issuance.
4. The Parties agree to execute an amendment to Work Order No. 3 under that certain Master Agreement for Manufacturing Services dated March 16, 2020, as amended on June 16, 2020, between Artiva and GC Cell, to reflect that, from April 1, 2023, to December 12, 2024, the AB-201 designated suite shall not be included as part of the GMP facility that Artiva has exclusive access, and the facility fee will accordingly be reduced to [***] during this time.

-
5. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which shall constitute together the same document. The Parties agree that signatures transmitted by electronic means (e.g. facsimile or a scanned version of the executed agreement in PDF format attached to an e-mail) shall bind the Parties. This Amendment is otherwise governed by the terms and conditions of the Agreement, except as amended hereby.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the undersigned parties have had this Amendment executed by its duly authorized representatives.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan

Printed Name: Fred Aslan

Title: CEO

GC CELL CORPORATION

By: /s/ James Park

Printed Name: James Park

Title: CEO

LEASE AGREEMENT

THIS LEASE AGREEMENT (this “**Lease**”) is made this 16 day of June, 2021, between **ARE-SD REGION NO. 66, LLC**, a Delaware limited liability company (“**Landlord**”), and **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Tenant**”).

Building: 5505 Morehouse Drive, San Diego, CA 92121

Premises: That portion of the Building containing approximately 51,621 rentable square feet, consisting of (i) that portion of the first floor known as Suite 110, containing approximately 9,180 rentable square feet (the “**Suite 110 Premises**”), (ii) that portion of the first floor known as Suite 120, containing approximately 14,117 rentable square feet (the “**Suite 120 Premises**”), and (iii) the entire second floor of the Building known as Suite 200, containing approximately 28,324 rentable square feet (the “**Suite 200 Premises**”), all as determined by Landlord, as shown on **Exhibit A**.

Project: The real property on which the Building in which the Premises are located, together with all improvements thereon and appurtenances thereto as described on **Exhibit B**.

Base Rent: Initially, \$57.00 per rentable square foot of the Premises per year. Base Rent shall be subject to adjustment pursuant to Section 4 hereof.

Rentable Area of Premises: 51,621 sq. ft.

Rentable Area of Building/Project: 79,945 sq. ft.

Tenant’s Share of Operating Expenses: 64.57% (11.48% attributable to the Suite 110 Premises, 17.66% attributable to the Suite 120 Premises and 35.43% attributable to the Suite 200 Premises)

Security Deposit: \$245,199.75

Target Commencement Date: April 15, 2022; provided, however, that the Target Commencement Date shall be delayed 1 day for each day after June 15, 2021, that Tenant has not delivered an executed copy of this Lease reasonably acceptable to Landlord.

Rent Adjustment Percentage: 3.0%

Base Term: Beginning on the Commencement Date and ending on the date that is 88 months from the Commencement Date.

Permitted Use: Research and development laboratory, cGMP manufacturing (with respect to the Suite 110 Premises only), related office and other related uses consistent with the character of the Project and otherwise in compliance with the provisions of Section 7 hereof.

Address for Rent Payment: Alexandria Real Estate Equities, Inc.
Dept LA 23447
Pasadena, CA 91185-3447

Landlord’s Notice Address: 26 North Euclid Avenue
Pasadena, CA 91101
Attention: Corporate Secretary

Tenant’s Notice Address
Prior to Commencement Date: 4747 Executive Drive #1150
San Diego, CA 92121
Attention: Lease Administrator

Tenant’s Notice Address
Following Commencement Date: 5505 Morehouse Drive, Suite 120
San Diego, CA 92121
Attention: Lease Administrator



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The following Exhibits and Addenda are attached hereto and incorporated herein by this reference:

[X] **EXHIBIT A** - PREMISES DESCRIPTION
[X] **EXHIBIT C-1** - INITIAL PREMISES WORK LETTER
[X] **EXHIBIT C-2** - SUBSEQUENT PREMISES WORK LETTER
[X] **EXHIBIT D** - COMMENCEMENT DATE
[X] **EXHIBIT F** - TENANT'S PROPERTY
[X] **EXHIBIT H** - CONTROL AREAS

[X] **EXHIBIT B** - DESCRIPTION OF PROJECT
[X] **EXHIBIT E** - RULES AND REGULATIONS
[X] **EXHIBIT G** - MAINTENANCE OBLIGATIONS

1. **Lease of Premises.** Upon and subject to all of the terms and conditions hereof, Landlord hereby leases the Premises to Tenant and Tenant hereby leases the Premises from Landlord. The portions of the Project which are for the non-exclusive use of tenants of the Project are collectively referred to herein as the “**Common Areas**.” Landlord reserves the right to modify Common Areas, provided that such modifications do not materially adversely affect Tenant’s access to or use of the Premises for the Permitted Use. From and after the Commencement Date through the expiration of the Term, Tenant shall have access to the Building and the Premises 24 hours a day, 7 days a week, except in the case of emergencies, as the result of Legal Requirements, the performance by Landlord of any installation, maintenance or repairs, or any other temporary interruptions, and otherwise subject to the terms of this Lease.

2. Delivery; Acceptance of Initial Premises; Initial Premises Commencement Date; Subsequent Premises Commencement Date.

(a) **Initial Premises.** Landlord shall use reasonable efforts to deliver the Suite 120 Premises and the Suite 200 Premises (collectively, the “**Initial Premises**”) to Tenant on or before the Target Commencement Date, with Landlord’s Work Substantially Completed (“**Delivery**” or “**Deliver**”). If Landlord fails to timely Deliver the Initial Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease shall not be void or voidable except as provided herein. If Landlord fails to Deliver the Initial Premises with Landlord’s Work Substantially Completed by the date that is 90 days after the Target Commencement Date (as such date may be extended for Force Majeure (as defined in [Section 34](#)) delays and Tenant Delays, the “**Abatement Date**”), then, commencing on the Rent Commencement Date, Base Rent payable with respect to the Initial Premises only shall be abated 1 day for each day after the Abatement Date that Landlord fails to Deliver the Initial Premises to Tenant. If Landlord does not Deliver the Initial Premises within 120 days of the Target Commencement Date for any reason other than Force Majeure delays and Tenant Delays, this Lease may be terminated by Tenant by written notice to Landlord, and if so terminated by Tenant: (a) the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant, and (b) neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with respect to provisions which expressly survive termination of this Lease. As used in this [Section 2\(a\)](#), the terms “**Landlord’s Work**,” “**Tenant Delays**” and “**Substantially Completed**” shall have the meanings set forth for such terms in the Initial Premises Work Letter. If Tenant does not elect to void this Lease within 10 business days of the lapse of such 120-day period, such right to void this Lease shall be waived and this Lease shall remain in full force and effect.

Notwithstanding the foregoing, Landlord and Tenant agree that if any Governmental Authority having jurisdiction of the Project, as a result of the COVID-19 outbreak in the United States declares or implements any order or mandate that restricts construction activities in San Diego county (any such order or mandate, a “**Government Mandate**”), then, to the extent such Government Mandate precludes construction of Landlord’s Work (as defined in the Initial Premises Work Letter), the Target Commencement Date shall be delayed 1 day for each day that such a Government Mandate remains in effect and continues to preclude such construction of the construction of Landlord’s Work.

The “**Commencement Date**” shall be the earlier of: (i) the date Landlord Delivers the Initial Premises to Tenant; or (ii) the date Landlord could have Delivered the Initial Premises but for Tenant Delays. The “**Rent Commencement Date**” with respect to the Initial Premises shall be the date that is 60 days after the Commencement Date.



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Subject to the provisions of Section 6 of the Work Letter, Landlord shall permit Tenant access to the Initial Premises for a period of 30 days prior to the Commencement Date for Tenant's installation and setup of furniture, fixtures and equipment ("**FF&E Installation**") in the Initial Premises, provided that such FF&E Installation is coordinated with Landlord, and Tenant complies with this Lease and all other reasonable restrictions and conditions Landlord may impose. All such access shall be during normal business hours. Any access to the Initial Premises by Tenant before the Commencement Date shall be subject to all of the terms and conditions of this Lease, excluding the obligation to pay Base Rent or Operating Expenses.

Except as set forth in the Initial Premises Work Letter: (i) Tenant shall accept the Initial Premises in their condition as of the Commencement Date; (ii) Landlord shall have no obligation for any defects in the Initial Premises; and (iii) Tenant's taking possession of the Initial Premises shall be conclusive evidence that Tenant accepts the Initial Premises and that the Initial Premises were in good condition at the time possession was taken. Prior to the Subsequent Premises Commencement Date (as defined in Section 2(b) below), all references to "**Premises**" in this Lease shall mean the Initial Premises.

(b) **Subsequent Premises.** Landlord shall use reasonable efforts to Deliver the Suite 110 Premises (the "**Subsequent Premises**") to Tenant on or before June 14, 2022 (the "**Subsequent Premises Target Commencement Date**"), with the Subsequent Premises Tenant Improvements Substantially Completed. Notwithstanding the foregoing, the Subsequent Premises Target Commencement Date shall be delayed 1 day for each day after June 15, 2021, that Tenant has not delivered an executed copy of this Lease reasonably acceptable to Landlord. If Landlord fails to timely Deliver the Subsequent Premises, Landlord shall not be liable to Tenant for any loss or damage resulting therefrom, and this Lease shall not be void or voidable except as provided herein. If Landlord fails to Deliver the Subsequent Premises with the Subsequent Premises Tenant Improvements Substantially Completed by the date that is 90 days after the Subsequent Premises Target Commencement Date (as such date may be extended for Force Majeure delays and Tenant Delays, the "**Subsequent Premises Abatement Date**"), then, commencing on the Subsequent Premises Rent Commencement Date, Base Rent payable with respect to the Subsequent Premises only shall be abated 1 day for each day after the Subsequent Premises Abatement Date that Landlord fails to Deliver the Subsequent Premises to Tenant. If Landlord does not Deliver the Subsequent Premises with the Subsequent Premises Tenant Improvements Substantially Completed within 365 days of the Subsequent Premises Target Commencement Date for any reason other than Force Majeure delays and Tenant Delays, this Lease may be terminated by Tenant by written notice to Landlord, and if so terminated by Tenant, following the surrender by Tenant of the Subsequent Premises pursuant to the terms and in the condition required under this Lease: (a) the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant, and (b) neither Landlord nor Tenant shall have any further rights, duties or obligations under this Lease, except with respect to provisions which expressly survive termination of this Lease. As used in this Section 2(b), the terms "**Subsequent Premises Tenant Improvements**," "**Tenant Delays**" and "**Substantially Completed**" shall have the meanings set forth for such terms in the Subsequent Premises Work Letter. If Tenant does not elect to void this Lease within 10 business days of the lapse of such 365-day period, such right to terminate this Lease shall be waived and this Lease shall remain in full force and effect.

Notwithstanding the foregoing, Landlord and Tenant agree that if any Governmental Authority having jurisdiction of the Project, as a result of the COVID-19 outbreak in the United States, declares or implements any Government Mandate then, to the extent such Government Mandate precludes construction of the Subsequent Premises Tenant Improvements, the Target Subsequent Premises Commencement Date shall be delayed 1 day for each day that such a Government Mandate remains in effect and continues to preclude such construction of the construction of the Subsequent Premises Tenant Improvements.

The "**Subsequent Premises Commencement Date**" shall be the earlier of: (i) the date Landlord Delivers the Subsequent Premises to Tenant with the Subsequent Premises Tenant Improvements Substantially Completed; or (ii) the date Landlord could have Delivered the Subsequent Premises with the Subsequent Premises Tenant Improvements Substantially Completed but for Tenant Delays. The



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“**Subsequent Premises Rent Commencement Date**” with respect to the Subsequent Premises shall be the date that is 60 days after the Subsequent Premises Commencement Date. Commencing on the Subsequent Premises Rent Commencement Date, Tenant shall pay Base Rent per rentable square foot of the Subsequent Premises at the same rate of Base Rent that Tenant is then paying on a per rentable square foot basis with respect to the Initial Premises, subject to adjustment pursuant to Section 4 below.

Subject to the provisions of Section 6 of the Subsequent Premises Work Letter, Landlord shall permit Tenant access to the Subsequent Premises for a period of 30 days prior to the Subsequent Premises Commencement Date for Tenant’s FF&E Installation in the Subsequent Premises, provided that such FF&E Installation is coordinated with Landlord, and Tenant complies with this Lease and all other reasonable restrictions and conditions Landlord may impose. All such access shall be during normal business hours. Any access to the Subsequent Premises by Tenant before the Subsequent Premises Commencement Date shall be subject to all of the terms and conditions of this Lease, excluding the obligation to pay Base Rent or Operating Expenses with respect to the Subsequent Premises.

Except as set forth in the Subsequent Premises Work Letter: (i) Tenant shall accept the Subsequent Premises in their condition as of the Subsequent Premises Commencement Date; (ii) Landlord shall have no obligation for any defects in the Subsequent Premises; and (iii) Tenant’s taking possession of the Subsequent Premises shall be conclusive evidence that Tenant accepts the Subsequent Premises and that the Subsequent Premises were in good condition at the time possession was taken.

(c) **General.** Upon request of Landlord, Tenant shall execute and deliver a written acknowledgment of the Commencement Date, the Rent Commencement Date, the Subsequent Premises Commencement Date, the Subsequent Premises Rent Commencement Date, the Suite 120 Premises Rent Commencement Date and the expiration date of the Term when such are established in the form of the “Acknowledgement of Commencement Date” attached to this Lease as **Exhibit D**; provided, however, Tenant’s failure to execute and deliver such acknowledgment shall not affect Landlord’s rights hereunder. The “**Term**” of this Lease shall be the Base Term, as defined above on the first page of this Lease and the Extension Term which Tenant may elect pursuant to Section 39 hereof. On and after the Subsequent Premises Commencement Date, all references to “**Premises**” in this Lease shall mean the Initial Premises and the Subsequent Premises.

Tenant agrees and acknowledges that neither Landlord nor any agent of Landlord has made any representation or warranty with respect to the condition of all or any portion of the Premises or the Project, and/or the suitability of the Premises or the Project for the conduct of Tenant’s business, and Tenant waives any implied warranty that the Premises or the Project are suitable for the Permitted Use. This Lease constitutes the complete agreement of Landlord and Tenant with respect to the subject matter hereof and supersedes any and all prior representations, inducements, promises, agreements, understandings and negotiations which are not contained herein. Landlord in executing this Lease does so in reliance upon Tenant’s representations, warranties, acknowledgments and agreements contained herein.

3. Rent.

(a) **Base Rent.** Base Rent for the month in which Rent Commencement Date, the Subsequent Premises Rent Commencement Date and the Suite 120 Premises Rent Commencement Date (as defined below) occur (or, if the Rent Commencement Date, the Subsequent Premises Rent Commencement Date, and/or the Suite 120 Premises Rent Commencement Date, as applicable, does not occur on the first day of a calendar month, Base Rent for the first full calendar month following the Rent Commencement Date, the Subsequent Premises Rent Commencement Date and/or the Suite 120 Premises Rent Commencement Date, as appropriate) and the Security Deposit shall be due and payable concurrently with Tenant’s delivery of an executed copy of this Lease to Landlord. Tenant shall pay to Landlord in advance, without demand, abatement, deduction or set-off, monthly installments of Base Rent on or before the first day of each calendar month during the Term hereof, in lawful money of the United States of America, at the office of Landlord for payment of Rent set forth above, or to such other person or at such other place as Landlord may from time to time designate in writing, or via federally insured wire transfer (including ACH) pursuant



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to the wire instructions provided by Landlord. Payments of Base Rent for any fractional calendar month shall be prorated. The obligation of Tenant to pay Base Rent and other sums to Landlord and the obligations of Landlord under this Lease are independent obligations. Tenant shall have no right at any time to abate, reduce, or set-off any Rent (as defined in Section 5) due hereunder except for any abatement as may be expressly provided in this Lease.

Notwithstanding anything to the contrary contained herein, so long as Tenant is not in default under this Lease, Base Rent payable with respect to the Suite 120 Premises only shall be abated for the period commencing on the Rent Commencement Date through the first annual anniversary of the Commencement Date (the “**Partial Abatement Period**”). Tenant shall commence paying Base Rent with respect to the entire Premises on the day immediately following the Partial Abatement Period (the “**Suite 120 Premises Rent Commencement Date**”).

(b) **Additional Rent.** In addition to Base Rent, Tenant agrees to pay to Landlord as additional rent (“**Additional Rent**”): (i) commencing on the Commencement Date with respect to the Initial Premises and on the Subsequent Premises Commencement Date with respect to the Subsequent Premises, Tenant’s Share of “Operating Expenses” (as defined in Section 5), and (ii) any and all other amounts Tenant assumes or agrees to pay under the provisions of this Lease, including, without limitation, any and all other sums that may become due by reason of any default of Tenant or failure to comply with the agreements, terms, covenants and conditions of this Lease to be performed by Tenant, after any applicable notice and cure period.

4. Base Rent Adjustments. Base Rent shall be increased on each annual anniversary of the Commencement Date (provided, however, that if the Commencement Date occurs on a day other than the first day of a calendar month, then Base Rent shall be increased on each annual anniversary of the first day of the first full calendar month immediately following the Commencement Date) (each an “**Adjustment Date**”) by multiplying the Base Rent payable immediately before such Adjustment Date by the Rent Adjustment Percentage and adding the resulting amount to the Base Rent payable immediately before such Adjustment Date. Base Rent, as so adjusted, shall thereafter be due as provided herein. Base Rent adjustments for any fractional calendar month shall be prorated.

5. Operating Expense Payments. Landlord shall deliver to Tenant a written estimate of Operating Expenses for each calendar year during the Term (the “**Annual Estimate**”), which may be revised by Landlord from time to time during such calendar year. Commencing on the Commencement Date with respect to the Initial Premises and on the Subsequent Premises Commencement Date with respect to the Subsequent Premises, and continuing thereafter on the first day of each month during the Term, Tenant shall pay Landlord an amount equal to 1/12th of Tenant’s Share of the Annual Estimate. Payments for any fractional calendar month shall be prorated.

The term “**Operating Expenses**” means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Landlord with respect to the Project (including, without duplication, (i) Taxes (as defined in Section 9), (ii) the cost of upgrades to the Building or Project or enhanced services provided at the Building and/or Project which are intended to encourage social distancing, promote and protect health and physical well-being and/or intended to limit the spread of communicable diseases and/or viruses of any kind or nature (collectively, “**Infectious Conditions**”), (iii) the cost (including, without limitation, any commercially reasonable subsidies which Landlord may provide in connection with the Project Amenities) of any common area amenities (the “**Project Amenities**”) now or hereafter located at the Project, if any, (iv) transportation services (including the Shuttle Service Costs (as defined in Section 41(s)), (v) capital repairs, improvements and replacements amortized over the useful life of such capital repairs, improvements and replacements (as reasonably determined by Landlord taking into account all relevant factors (including sound real estate accounting practices and, if applicable, the 24 hour per day, 7 day per week, operation of the Building and any Building Systems (as defined in Section 13), and (vi) the costs of Landlord’s third party property manager (not to exceed 3% of Base Rent) or, if there is no third party property manager, administration rent in the amount of 3.0% of Base Rent) (provided that during the Partial Abatement Period, Tenant shall nonetheless be required to pay administration rent each



month equal to the amount of the administration rent that Tenant would have been required to pay in the absence of there being a Partial Abatement Period), excluding only:

(a) the original construction costs of the Project and renovation prior to the Commencement Date and costs of correcting defects in such original construction or renovation;

(b) capital expenditures for expansion of the Project and capital repairs and replacements other than the properly amortized portion thereof (i.e. amortized over the useful life of such capital repairs, improvements and replacements (as reasonably determined by Landlord taking into account all relevant factors (including sound real estate accounting practices and, if applicable, the 24 hour per day, 7 day per week, operation of the Building and any Building Systems) as provided above);

(c) interest, principal payments of Mortgage (as defined in Section 27) debts of Landlord, financing costs and amortization of funds borrowed by Landlord, whether secured or unsecured;

(d) depreciation of the Project (except for capital improvements, the cost of which are includable in Operating Expenses which shall be amortized as provided above in the second full paragraph of this Section 5);

(e) advertising, legal and space planning expenses and leasing commissions and other costs and expenses incurred in procuring and leasing space to tenants for the Project, including any leasing office maintained in the Project, free rent and construction allowances for tenants;

(f) legal and other expenses incurred in the negotiation or enforcement of leases;

(g) completing, fixturing, improving, renovating, painting, redecorating or other work, which Landlord pays for or performs for other tenants within their premises, and costs of correcting defects in such work;

(h) costs to be reimbursed by other tenants of the Project or Taxes to be paid directly by Tenant or other tenants of the Project, whether or not actually paid;

(i) salaries, wages, benefits and other compensation paid to officers and employees of Landlord who are not assigned in whole or in part to the operation, management, maintenance or repair of the Project;

(j) general organizational, administrative and overhead costs relating to maintaining Landlord's existence, either as a corporation, partnership, or other entity, including general corporate, legal and accounting expenses;

(k) costs (including attorneys' fees and costs of settlement, judgments and payments in lieu thereof) incurred in connection with disputes with tenants, other occupants, or prospective tenants, and costs and expenses, including legal fees, incurred in connection with negotiations or disputes with employees, consultants, management agents, leasing agents, purchasers or mortgagees of the Building;

(l) costs incurred by Landlord due to the violation by Landlord, its employees, agents or contractors or any tenant of the terms and conditions of any lease of space in the Project or any Legal Requirement (as defined in Section 7);

(m) penalties, fines or interest incurred as a result of Landlord's inability or failure to make payment of Taxes and/or to file any tax or informational returns when due, or from Landlord's failure to make any payment of Taxes required to be made by Landlord hereunder before delinquency;



- (n) overhead and profit increment paid to Landlord or to subsidiaries or affiliates of Landlord for goods and/or services in or to the Project to the extent the same exceeds the costs of such goods and/or services rendered by unaffiliated third parties on a competitive basis;
- (o) costs of Landlord's charitable or political contributions, or of artwork maintained at the Project;
- (p) costs in connection with services (including electricity), items or other benefits of a type which are not standard for the Project and which are not available to Tenant without specific charges therefor, but which are provided to another tenant or occupant of the Project, whether or not such other tenant or occupant is specifically charged therefor by Landlord;
- (q) costs incurred in the sale or refinancing of the Project;
- (r) net income taxes of Landlord or the owner of any interest in the Project, franchise, capital stock, gift, estate or inheritance taxes or any federal, state or local documentary taxes imposed against the Project or any portion thereof or interest therein;
- (s) costs incurred by Landlord as a result of the gross negligence or willful misconduct of Landlord;
- (t) cost of repairs or other work necessitated by fire, windstorm or other similar casualty (except for insurance deductibles);
- (u) any costs incurred to remove, study, test or remediate Hazardous Materials (as defined in Section 30) in or about the Building or the Project for which Tenant is not responsible under this Lease;
- (v) any expenses otherwise includable within Operating Expenses to the extent actually reimbursed by persons other than tenants of the Project under leases for space in the Project.

In addition, notwithstanding anything to the contrary contained in this Lease, Operating Expenses incurred or accrued by Landlord with respect to any capital improvements which are reasonably expected by Landlord to reduce overall Operating Expenses (for example, without limitation, by reducing energy usage at the Project) (the "**Energy Savings Costs**") shall be amortized over a period of years equal to the least of (A) the useful life of such capital items, or (B) the quotient of (i) the Energy Savings Costs, divided by (ii) the annual amount of Operating Expenses reasonably expected by Landlord to be saved as a result of such capital improvements.

Within 90 days after the end of each calendar year (or such longer period as may be reasonably required), Landlord shall furnish to Tenant a statement (an "**Annual Statement**") showing in reasonable detail: (a) the total and Tenant's Share of actual Operating Expenses for the previous calendar year, and (b) the total of Tenant's payments in respect of Operating Expenses for such year. If Tenant's Share of actual Operating Expenses for such year exceeds Tenant's payments of Operating Expenses for such year, the excess shall be due and payable by Tenant as Rent within 30 days after delivery of such Annual Statement to Tenant. If Tenant's payments of Operating Expenses for such year exceed Tenant's Share of actual Operating Expenses for such year Landlord shall pay the excess to Tenant within 30 days after delivery of such Annual Statement, except that after the expiration, or earlier termination of the Term or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. Landlord's and Tenant's obligations to pay any overpayments or deficiencies due pursuant to this paragraph shall survive the expiration or earlier termination of this Lease.

The Annual Statement shall be final and binding upon Tenant unless Tenant, within 90 days after Tenant's receipt thereof, shall contest any item therein by giving written notice to Landlord, specifying each item contested and the reason therefor. If, during such 90 day period, Tenant reasonably and in good faith questions or contests the accuracy of Landlord's statement of Tenant's Share of Operating Expenses,



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Landlord will provide Tenant with access to Landlord's books and records relating to the operation of the Project and such information as Landlord reasonably determines to be responsive to Tenant's questions (the "**Expense Information**"). If after Tenant's review of such Expense Information, Landlord and Tenant cannot agree upon the amount of Tenant's Share of Operating Expenses, then Tenant shall have the right to have an independent regionally or nationally recognized public accounting firm selected by Tenant, working pursuant to a fee arrangement other than a contingent fee (at Tenant's sole cost and expense) and approved by Landlord (which approval shall not be unreasonably withheld, conditioned or delayed), audit and/or review the Expense Information for the year in question (the "**Independent Review**"). The results of any such Independent Review shall be binding on Landlord and Tenant. If the Independent Review shows that the payments actually made by Tenant with respect to Operating Expenses for the calendar year in question exceeded Tenant's Share of Operating Expenses for such calendar year, Landlord shall at Landlord's option either (i) credit the excess amount to the next succeeding installments of estimated Operating Expenses or (ii) pay the excess to Tenant within 30 days after delivery of such statement, except that after the expiration or earlier termination of this Lease or if Tenant is delinquent in its obligation to pay Rent, Landlord shall pay the excess to Tenant after deducting all other amounts due Landlord. If the Independent Review shows that Tenant's payments with respect to Operating Expenses for such calendar year were less than Tenant's Share of Operating Expenses for the calendar year, Tenant shall pay the deficiency to Landlord within 30 days after delivery of such statement. If the Independent Review shows that Tenant has overpaid with respect to Operating Expenses by more than 5% then Landlord shall reimburse Tenant for all costs incurred by Tenant for the Independent Review. Operating Expenses for the calendar years in which Tenant's obligation to share therein begins and ends shall be prorated. Notwithstanding anything set forth herein to the contrary, if the Project is not at least 95% occupied on average during any year of the Term, Tenant's Share of Operating Expenses for such year shall be computed as though the Project had been 95% occupied on average during such year.

"**Tenant's Share**" shall be the percentage set forth on the first page of this Lease as Tenant's Share as reasonably adjusted by Landlord for changes in the physical size of the Premises or the Project occurring thereafter. Landlord may equitably increase Tenant's Share for any item of expense or cost reimbursable by Tenant that relates to a repair, replacement, or service that benefits only the Premises or only a portion of the Project that includes the Premises or that varies with occupancy or use. Base Rent, Tenant's Share of Operating Expenses and all other amounts payable by Tenant to Landlord hereunder are collectively referred to herein as "**Rent**."

6. Security Deposit. Tenant shall deposit with Landlord, upon delivery of an executed copy of this Lease to Landlord, a security deposit (the "**Security Deposit**") for the performance of all of Tenant's obligations hereunder in the amount set forth on page 1 of this Lease, which Security Deposit shall be in the form of an unconditional and irrevocable letter of credit (the "**Letter of Credit**"): (i) in form and substance satisfactory to Landlord, (ii) naming Landlord as beneficiary, (iii) expressly allowing Landlord to draw upon it at any time from time to time by delivering to the issuer notice that Landlord is entitled to draw thereunder, (iv) issued by an FDIC-insured financial institution satisfactory to Landlord, and (v) redeemable by presentation of a sight draft in the state of Landlord's choice. Tenant shall provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 10 days before the stated expiration date of any then current Letter of Credit. If Tenant does not provide Landlord with a substitute Letter of Credit complying with all of the requirements hereof at least 10 days before the stated expiration date of any then current Letter of Credit, Landlord shall have the right to draw the full amount of the current Letter of Credit and hold the funds drawn in cash without obligation for interest thereon as the Security Deposit. The Security Deposit shall be held by Landlord as security for the performance of Tenant's obligations under this Lease. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Upon each occurrence of a Default (as defined in Section 20), Landlord may use all or any part of the Security Deposit to pay delinquent payments due under this Lease, future rent damages under California Civil Code Section 1951.2, and the cost of any damage, injury, expense or liability caused by such Default, without prejudice to any other remedy provided herein or provided by law. Landlord's right to use the Security Deposit under this Section 6 includes the right to use the Security Deposit to pay future rent damages following the termination of this Lease pursuant to Section 21(c) below. Upon any use of all or any portion of the Security Deposit, Tenant shall pay Landlord within 10 days of demand the amount that will restore the Security Deposit to the amount set forth on Page 1 of



this Lease. Tenant hereby waives the provisions of any law, now or hereafter in force, including, without limitation, California Civil Code Section 1950.7, which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of Rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other actual loss or damage, whether the same was foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant. Upon bankruptcy or other debtor-creditor proceedings against Tenant, the Security Deposit shall be deemed to be applied first to the payment of Rent and other charges due Landlord for periods prior to the filing of such proceedings. If Tenant shall fully perform every provision of this Lease to be performed by Tenant, the Security Deposit, or any balance thereof (i.e., after deducting therefrom all amounts to which Landlord is entitled under the provisions of this Lease), shall be returned to Tenant (or, at Landlord's option, to the last assignee of Tenant's interest hereunder) within 90 days after the expiration or earlier termination of this Lease.

If Landlord transfers its interest in the Project or this Lease, Landlord shall either (a) transfer any Security Deposit then held by Landlord to a person or entity assuming Landlord's obligations under this Section 6, or (b) return to Tenant any Security Deposit then held by Landlord and remaining after the deductions permitted herein. Upon such transfer to such transferee or the return of the Security Deposit to Tenant, Landlord shall have no further obligation with respect to the Security Deposit, and Tenant's right to the return of the Security Deposit shall apply solely against Landlord's transferee. The Security Deposit is not an advance rental deposit or a measure of Landlord's damages in case of Tenant's default. Landlord's obligation respecting the Security Deposit is that of a debtor, not a trustee, and no interest shall accrue thereon.

7. Use. The Premises shall be used solely for the Permitted Use set forth in the basic lease provisions on page 1 of this Lease, and in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Premises, and to the use and occupancy thereof, including, without limitation, the Americans With Disabilities Act, 42 U.S.C. § 12101, et seq. (together with the regulations promulgated pursuant thereto, "ADA") (collectively, "**Legal Requirements**" and each, a "**Legal Requirement**"). Tenant shall, upon 5 days' written notice from Landlord, discontinue any use of the Premises which is declared by any Governmental Authority (as defined in Section 2) having jurisdiction to be a violation of a Legal Requirement. Tenant will not use or permit the Premises to be used for any purpose or in any manner that would void Tenant's or Landlord's insurance, increase the insurance risk, or cause the disallowance of any sprinkler or other credits. Tenant shall not permit any part of the Premises to be used as a "place of public accommodation", as defined in the ADA or any similar legal requirement. Tenant shall reimburse Landlord within 30 days after demand for any additional premium charged for any such insurance policy by reason of Tenant's failure to comply with the provisions of this Section or otherwise caused by Tenant's specific use of the Premises. Tenant will use the Premises in a careful, safe and proper manner and will not commit or permit waste, overload the floor or structure of the Premises, subject the Premises to use that would damage the Premises or obstruct or interfere with the rights of Landlord or other tenants or occupants of the Project, including conducting or giving notice of any auction, liquidation, or going out of business sale on the Premises, or using or allowing the Premises to be used for any unlawful purpose. Tenant shall cause any equipment or machinery to be installed in the Premises so as to reasonably prevent sounds or vibrations from the Premises from extending into Common Areas, or other space in the Project. Tenant shall not place any machinery or equipment that would overload the floor in or upon the Premises or transport or move such items through the Common Areas of the Project or in the Project elevators without the prior written consent of Landlord, which shall not be unreasonably withheld, conditioned or delayed. Except as may be provided under the Initial Premises Work Letter or the Subsequent Premises Work Letter, Tenant shall not, without the prior written consent of Landlord, use the Premises in any manner which will require ventilation, air exchange, heating, gas, steam, electricity or water beyond the existing capacity of the Project as proportionately allocated to the Premises based upon Tenant's Share as usually furnished for the Permitted Use.

The terms of this Lease shall be subject in all respects to the provisions of that certain Amendment in its Entirety and Restatement of Covenants, Conditions and Restrictions of Lusk Mira/Mesa Industrial



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Park, dated April 21, 1981, recorded with the County Recorder of San Diego, State of California, as Instrument No. 81-178070 (re-recorded as Instrument No. 81-391102) (as supplemented and amended from time to time, the “**Declaration**”), the applicable Articles of Incorporation, Bylaws, and the Architectural Standards/Association Rules (as such terms are defined in the Declaration), and any applicable agreements between the Lusk Mira/Mesa Industrial Park Association and the City of San Diego, and any and all amendments from time to time of any of the foregoing.

Landlord shall be responsible, (i) subject to the terms of the Initial Premises Work Letter, for the compliance of the Initial Premises with Legal Requirements (including the ADA) as of the Commencement Date, (ii) subject to the terms of the Subsequent Premises Work Letter, for the compliance of the Subsequent Premises with Legal Requirements (including the ADA) as of the Subsequent Premises Commencement Date, and (iii) at Landlord’s cost, for the compliance of the Common Areas of the Project with Legal Requirements (including the ADA) as of the Commencement Date. Following the Commencement Date, Landlord shall, as an Operating Expense (to the extent such Legal Requirement is generally applicable to similar buildings in the area in which the Project is located) and at Tenant’s expense (to the extent such Legal Requirement is triggered by reason of Tenant’s, as compared to other tenants of the Project, particular use of the Premises or Tenant’s Alterations) make any alterations or modifications to the Common Areas or the exterior of the Building that are required by Legal Requirements. Except as otherwise expressly provided in this paragraph, Tenant, at its sole expense, shall make any alterations or modifications to the interior of the Premises that are required by Legal Requirements (including, without limitation, compliance of the Premises with the ADA) related to Tenant’s use or occupancy of the Premises or Tenant’s Alterations. Notwithstanding any other provision herein to the contrary, Tenant shall be responsible for any and all demands, claims, liabilities, losses, costs, expenses, actions, causes of action, damages or judgments, and all reasonable expenses incurred in investigating or resisting the same (including, without limitation, reasonable attorneys’ fees, charges and disbursements and costs of suit) (collectively, “**Claims**”) arising out of or in connection with Legal Requirements related to Tenant’s specific use of the Premises (as opposed to general occupancy) or Tenant’s Alterations, and Tenant shall indemnify, defend, hold and save Landlord harmless from and against any and all Claims arising out of or in connection with any failure of the Premises to comply with any Legal Requirement related to Tenant’s use or occupancy of the Premises or Tenant’s Alterations.

Tenant acknowledges that Landlord may, but shall not be obligated to, seek to obtain Leadership in Energy and Environmental Design (LEED), WELL Building Standard, or other similar “green” certification with respect to the Project and/or the Premises, and Tenant agrees to reasonably cooperate with Landlord, and to provide such information and/or documentation as Landlord may reasonably request, in connection therewith.

8. Holding Over. If, with Landlord’s express written consent, Tenant retains possession of the Premises after the termination of the Term, (i) unless otherwise agreed in such written consent, such possession shall be subject to immediate termination by Landlord at any time, (ii) all of the other terms and provisions of this Lease (including, without limitation, the adjustment of Base Rent pursuant to Section 4 hereof) shall remain in full force and effect (excluding any expansion or renewal option or other similar right or option) during such holdover period, (iii) Tenant shall continue to pay Base Rent in the amount payable upon the date of the expiration or earlier termination of this Lease or such other amount as Landlord and Tenant may agree in such written consent, and (iv) all other payments shall continue under the terms of this Lease. If Tenant remains in possession of the Premises after the expiration or earlier termination of the Term without the express written consent of Landlord, (A) Tenant shall become a tenant at sufferance upon the terms of this Lease except that the monthly rental shall be equal to 150% of Rent in effect during the last 30 days of the Term, and (B) with respect to any period of holdover in excess of 30 days, Tenant shall be responsible for all damages suffered by Landlord resulting from or occasioned by Tenant’s holding over, including consequential damages. No holding over by Tenant, whether with or without consent of Landlord, shall operate to extend this Lease except as otherwise expressly provided, and this Section 8 shall not be construed as consent for Tenant to retain possession of the Premises. Acceptance by Landlord of Rent after the expiration of the Term or earlier termination of this Lease shall not result in a renewal or reinstatement of this Lease.



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9. **Taxes.** Landlord shall pay, as part of Operating Expenses, all taxes, levies, fees, assessments and governmental charges of any kind, existing as of the Commencement Date or thereafter enacted (collectively referred to as “**Taxes**”), imposed by any federal, state, regional, municipal, local or other governmental authority or agency, including, without limitation, quasi-public agencies (collectively, “**Governmental Authority**”) during the Term, including, without limitation, all Taxes: (i) imposed on or measured by or based, in whole or in part, on rent payable to (or gross receipts received by) Landlord under this Lease and/or from the rental by Landlord of the Project or any portion thereof, or (ii) based on the square footage, assessed value or other measure or evaluation of any kind of the Premises or the Project, or (iii) assessed or imposed by or on the operation or maintenance of any portion of the Premises or the Project, including parking, or (iv) assessed or imposed by, or at the direction of, or resulting from Legal Requirements, or interpretations thereof, promulgated by any Governmental Authority, or (v) imposed as a license or other fee, charge, tax, or assessment on Landlord’s business or occupation of leasing space in the Project. Landlord may contest by appropriate legal proceedings the amount, validity, or application of any Taxes or liens securing Taxes. Taxes shall not include any net income taxes, franchise taxes, capital levy taxes, documentary transfer taxes, excess profits taxes, estate taxes or inheritance taxes imposed on Landlord except to the extent such net income taxes are in substitution for any Taxes payable hereunder, or any late penalties, interest or fines unless due to any late payment of Rent by Tenant. If any such Tax is levied or assessed directly against Tenant, then Tenant shall be responsible for and shall pay the same at such times and in such manner as the taxing authority shall require. Tenant shall pay, prior to delinquency, any and all Taxes levied or assessed against any personal property or trade fixtures placed by Tenant in the Premises, whether levied or assessed against Landlord or Tenant. If any Taxes on Tenant’s personal property or trade fixtures are levied against Landlord or Landlord’s property, or if the assessed valuation of the Project is increased by a value attributable to improvements in or alterations to the Premises, whether owned by Landlord or Tenant and whether or not affixed to the real property so as to become a part thereof, higher than the base valuation on which Landlord from time-to-time allocates Taxes to all tenants in the Project, Landlord shall have the right, but not the obligation, to pay such Taxes. Landlord’s determination of any excess assessed valuation shall be binding and conclusive, absent manifest error. The amount of any such payment by Landlord shall constitute Additional Rent due from Tenant to Landlord immediately upon demand.

10. **Parking.** Subject to all applicable Legal Requirements, Force Majeure, a Taking (as defined in Section 19 below) and the exercise by Landlord of its rights hereunder, Tenant shall have the right, at no additional cost during the Base Term, to use 108 parking spaces, which parking spaces shall be located in those areas designated for non-reserved parking, subject in each case to Landlord’s rules and regulations. Landlord may allocate parking spaces among Tenant and other tenants in the Project pro rata as described above if Landlord determines that such parking facilities are becoming crowded. Landlord shall not be responsible for enforcing Tenant’s parking rights against any third parties, including other tenants of the Project.

If, during the Term, Landlord agrees to provide reserved parking spaces to one or more other tenants leasing space in the Building, then for so long as such reserved parking spaces are made available to such other tenant(s), Landlord shall make available to Tenant an equal number of reserved parking spaces (which reserved parking spaces shall count against the parking spaces allocated to Tenant in the first sentence of the immediately preceding paragraph), in locations reasonably determined by Landlord.

Tenant shall comply with the requirements of and participate in any traffic management plan affecting the Project which may be required by the City of San Diego or other applicable Governmental Authority.

11. **Utilities, Services.** Landlord shall provide, subject to the terms of this Section 11, water, electricity, heat, light, power, sewer, and other utilities (including gas and fire sprinklers to the extent the Project is plumbed for such services), and, with respect to the Common Areas only, refuse and trash collection and janitorial services (collectively, “**Utilities**”). Landlord shall pay, as Operating Expenses or subject to Tenant’s reimbursement obligation, for all Utilities used on the Premises, all maintenance charges for Utilities, and any storm sewer charges or other similar charges for Utilities imposed by any Governmental Authority or Utility provider, and any taxes, penalties, surcharges or similar charges thereon. Landlord may



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cause, at Tenant's expense, any Utilities to be separately metered or charged directly to Tenant by the provider. Tenant shall pay directly to the Utility provider, prior to delinquency, any separately metered Utilities and services which may be furnished to Tenant or the Premises during the Term. Tenant shall pay, as part of Operating Expenses, its share of all charges for jointly metered Utilities based upon consumption, as reasonably determined by Landlord. No interruption or failure of Utilities, from any cause whatsoever other than Landlord's willful misconduct, shall result in eviction or constructive eviction of Tenant, termination of this Lease or, except as otherwise provided in the immediately following paragraph, the abatement of Rent. Tenant agrees to limit use of water and sewer with respect to Common Areas to normal restroom use. Tenant shall be responsible for obtaining and paying for its own janitorial services for the Premises.

Notwithstanding anything to the contrary set forth herein, if (i) a stoppage of an Essential Service (as defined below) to the Premises shall occur and such stoppage is due solely to the gross negligence or willful misconduct of Landlord and not due in any part to any act or omission on the part of Tenant or any Tenant Party or any matter beyond Landlord's reasonable control (any such stoppage of an Essential Service being hereinafter referred to as a "**Service Interruption**"), and (ii) such Service Interruption continues for more than 5 consecutive business days after Landlord shall have received written notice thereof from Tenant, and (iii) as a result of such Service Interruption, the conduct of Tenant's normal operations in the Premises are materially and adversely affected, then there shall be an abatement of one day's Base Rent for each day during which such Service Interruption continues after such 5 business day period; provided, however, that if any part of the Premises is reasonably useable for Tenant's normal business operations or if Tenant conducts all or any part of its operations in any portion of the Premises notwithstanding such Service Interruption, then the amount of each daily abatement of Base Rent shall only be proportionate to the nature and extent of the interruption of Tenant's normal operations or ability to use the Premises. The rights granted to Tenant under this paragraph shall be Tenant's sole and exclusive remedy resulting from a failure of Landlord to provide services, and Landlord shall not otherwise be liable for any loss or damage suffered or sustained by Tenant resulting from any failure or cessation of services. For purposes hereof, the term "**Essential Services**" shall mean the following services: HVAC service, water, sewer and electricity, but in each case only to the extent that Landlord has an obligation to provide same to Tenant under this Lease.

Landlord's sole obligation for either providing an emergency generator or providing emergency back-up power to Tenant shall be: (i) to provide an emergency generator serving the Building which is designed to provide a total of 500kW of emergency power, and (ii) to contract with a third party to maintain the emergency generator as per the manufacturer's standard maintenance guidelines. Except as otherwise provided in the immediately preceding sentence, Landlord shall have no obligation to provide Tenant with an operational emergency generator or back-up power or to supervise, oversee or confirm that the third party maintaining the emergency generator is maintaining the generator as per the manufacturer's standard guidelines or otherwise. Landlord shall, upon written request from Tenant (not more frequently than once per calendar year), make available for Tenant's inspection the maintenance contract and maintenance records for the emergency generators for the 12 month period immediately preceding Landlord's receipt of Tenant's written request. During any period of replacement, repair or maintenance of the emergency generator when the emergency generator is not operational, including any delays thereto due to the inability to obtain parts or replacement equipment, Landlord shall have no obligation to provide Tenant with an alternative back-up generator or alternative sources of back-up power. Tenant expressly acknowledges and agrees that Landlord does not guaranty that such emergency generator will be operational at all times or that emergency power will be available to the Premises when needed.

Tenant agrees to provide Landlord with access to Tenant's water and/or energy usage data on a monthly basis, either by providing Tenant's applicable utility login credentials to Landlord's "Measurabl" online portal, or by another delivery method reasonably agreed to by Landlord and Tenant. The costs and expenses incurred by Landlord in connection with receiving and analyzing such water and/or energy usage data (including, without limitation, as may be required pursuant to applicable Legal Requirements) shall be included as part of Operating Expenses.



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12. Alterations and Tenant's Property. Any alterations, additions, or improvements made to the Premises by or on behalf of Tenant, including additional locks or bolts of any kind or nature upon any doors or windows in the Premises, but excluding installation, removal or realignment of furniture systems (other than removal of furniture systems owned or paid for by Landlord) not involving any modifications to the structure or connections (other than by ordinary plugs or jacks) to Building Systems ("**Alterations**") shall be subject to Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion if any such Alteration affects the structure or Building Systems and shall not be otherwise unreasonably withheld. Tenant may construct nonstructural, cosmetic Alterations in the Premises without Landlord's prior approval if the aggregate cost of all such work in any 12 month period does not exceed \$200,000.00 (a "**Notice-Only Alteration**"), provided Tenant notifies Landlord in writing of such intended Notice-Only Alteration, and such notice shall be accompanied by plans and specifications (to the extent such Notice-Only Alterations are of a nature that requires plans and specifications), work contracts and such other information concerning the nature and cost of the Notice-Only Alteration as may be reasonably requested by Landlord, which notice and accompanying materials shall be delivered to Landlord not less than 10 business days in advance of any proposed construction. If Landlord approves any Alterations, Landlord may impose such conditions on Tenant in connection with the commencement, performance and completion of such Alterations as Landlord may deem appropriate in Landlord's reasonable discretion. Any request for approval shall be in writing, delivered not less than 15 business days in advance of any proposed construction, and accompanied by plans, specifications, bid proposals, work contracts and such other information concerning the nature and cost of the alterations as may be reasonably requested by Landlord, including the identities and mailing addresses of all persons performing work or supplying materials. Landlord's right to review plans and specifications and to monitor construction shall be solely for its own benefit, and Landlord shall have no duty to ensure that such plans and specifications or construction comply with applicable Legal Requirements. Tenant shall cause, at its sole cost and expense, all Alterations to comply with insurance requirements and with Legal Requirements and shall implement at its sole cost and expense any alteration or modification required by Legal Requirements as a result of any Alterations. Tenant shall pay to Landlord, as Additional Rent, within 10 days of demand an amount equal to the actual, reasonable out-of-pocket costs incurred by Landlord with respect to each Alteration. Before Tenant begins any Alteration, Landlord may post on and about the Premises notices of non-responsibility pursuant to applicable law. Tenant shall reimburse Landlord for, and indemnify and hold Landlord harmless from, any expense actually incurred by Landlord by reason of faulty work done by Tenant or its contractors, delays caused by such work, or inadequate cleanup.

Tenant shall furnish security or make other arrangements satisfactory to Landlord to assure payment for the completion of all Alterations work free and clear of liens, and shall provide (and cause each contractor or subcontractor to provide) certificates of insurance for workers' compensation and other coverage in amounts and from an insurance company satisfactory to Landlord protecting Landlord against liability for personal injury or property damage during construction. Upon completion of any Alterations, Tenant shall deliver to Landlord: (i) sworn statements setting forth the names of all contractors and subcontractors who did the work and final lien waivers from all such contractors and subcontractors; and (ii) "as built" plans for any such Alteration.

Except for Removable Installations (as hereinafter defined), all Installations (as hereinafter defined) shall be and shall remain the property of Landlord during the Term and following the expiration or earlier termination of the Term, shall not be removed by Tenant at any time during the Term, and shall remain upon and be surrendered with the Premises as a part thereof. Notwithstanding the foregoing, Landlord may, at the time its approval of any such Installation is requested, notify Tenant that Landlord requires that Tenant remove such Installation upon the expiration or earlier termination of the Term, in which event Tenant shall remove such Installation in accordance with the immediately succeeding sentence. Upon the expiration or earlier termination of the Term, Tenant shall remove (i) all wires, cables or similar equipment which Tenant has installed in the Premises or in the risers or plenums of the Building, (ii) any Installations for which Landlord has given Tenant notice of removal in accordance with the immediately preceding sentence, and (iii) all of Tenant's Property (as hereinafter defined), and Tenant shall restore and repair any damage caused by or occasioned as a result of such removal, including, without limitation, capping off all such connections behind the walls of the Premises and repairing any holes. During any restoration period beyond the expiration or earlier termination of the Term, Tenant shall pay Rent to Landlord as provided



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herein as if said space were otherwise occupied by Tenant. If Landlord is requested by Tenant or any lender, lessor or other person or entity claiming an interest in any of Tenant's Property to waive any lien Landlord may have against any of Tenant's Property, and Landlord consents to such waiver, then Landlord shall be entitled to reimbursement from Tenant for its actual, reasonable out-of-pocket costs incurred in connection with the preparation and negotiation of each such waiver of lien.

For purposes of this Lease, (x) "**Removable Installations**" means any items listed on **Exhibit F** attached hereto and any items agreed by Landlord in writing to be included on **Exhibit F** in the future, (y) "**Tenant's Property**" means Removable Installations and, other than Installations, any personal property or equipment of Tenant that may be removed without material damage to the Premises, and (z) "**Installations**" means all property of any kind paid for out of the TI Fund, all Alterations, all fixtures, and all partitions, hardware, built-in machinery, built-in casework and cabinets and other similar additions, equipment, property and improvements built into the Premises so as to become an integral part of the Premises, including, without limitation, fume hoods which penetrate the roof or plenum area, built-in cold rooms, built-in warm rooms, walk-in cold rooms, walk-in warm rooms, deionized water systems, glass washing equipment, autoclaves, chillers, built-in plumbing, electrical and mechanical equipment and systems, and any power generator and transfer switch.

13. Landlord's Repairs. Landlord, as an Operating Expense, shall maintain all of the structural, exterior, parking and other Common Areas of the Project, including HVAC, plumbing, fire sprinklers, elevators and all other building systems serving the Premises and other portions of the Project ("**Building Systems**"), in good repair, reasonable wear and tear and uninsured losses and damages caused by Tenant, or by any of Tenant's assignees, sublessees, licensees, agents, servants, employees, invitees and contractors (or any of Tenant's assignees, sublessees and/or licensees respective agents, servants, employees, invitees and contractors) (collectively, "**Tenant Parties**") excluded. Losses and damages caused by Tenant or any Tenant Party shall be repaired by Landlord, to the extent not covered by insurance, at Tenant's sole cost and expense. Landlord reserves the right to stop Building Systems services when necessary (i) by reason of accident or emergency, or (ii) for planned repairs, alterations or improvements, which are, in the judgment of Landlord, desirable or necessary to be made, until said repairs, alterations or improvements shall have been completed. Landlord shall have no responsibility or liability for failure to supply Building Systems services during any such period of interruption; provided, however, that Landlord shall, except in the case of an emergency, make a commercially reasonable effort to give Tenant 24 hours advance notice of any planned stoppage of Building Systems services for routine maintenance, repairs, alterations or improvements. Tenant shall promptly give Landlord written notice of any repair required by Landlord pursuant to this Section, after which Landlord shall make a commercially reasonable effort to effect such repair. Landlord shall not be liable for any failure to make any repairs or to perform any maintenance unless such failure shall persist for an unreasonable time after Tenant's written notice of the need for such repairs or maintenance. Tenant waives its rights under any state or local law to terminate this Lease or to make such repairs at Landlord's expense and agrees that the parties' respective rights with respect to such matters shall be solely as set forth herein. Repairs required as the result of fire, earthquake, flood, vandalism, war, or similar cause of damage or destruction shall be controlled by Section 18.

14. Tenant's Repairs. Subject to Section 13 hereof, Tenant, at its expense, shall repair, replace and maintain in good condition all portions of the Premises, including, without limitation, entries, doors, ceilings, interior windows, interior walls, and the interior side of demising walls. Should Tenant fail to make any such repair or replacement or fail to maintain the Premises, Landlord shall give Tenant notice of such failure. If Tenant fails to commence cure of such failure within 10 days of Landlord's notice, and thereafter diligently prosecute such cure to completion, Landlord may perform such work and shall be reimbursed by Tenant within 10 days after demand therefor; provided, however, that if such failure by Tenant creates or could create an emergency, Landlord may immediately commence cure of such failure and shall thereafter be entitled to recover the costs of such cure from Tenant. Subject to Sections 17 and 18, Tenant shall bear the full uninsured cost of any repair or replacement to any part of the Project that results from damage caused by Tenant or any Tenant Party and any repair that benefits only the Premises.



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Notwithstanding anything to the contrary contained in this Lease, as of the Commencement Date with respect to the Initial Premises and as of the Subsequent Premises Commencement Date with respect to the Subsequent Premises, the maintenance and repair obligations for the Premises shall be allocated between Landlord and Tenant as set forth on **Exhibit G** attached hereto. The maintenance obligations allocated to Tenant pursuant to **Exhibit G** (the “**Tenant Maintenance Obligations**”) shall be performed by Tenant at Tenant’s sole cost and expense. The Tenant Maintenance Obligations shall include the procurement and maintenance of contracts, in form and substance reasonably satisfactory to Landlord, with copies to Landlord upon Landlord’s written request, for and with contractors reasonably acceptable to Landlord specializing and experienced in the respective Tenant Maintenance Obligations. Notwithstanding anything to the contrary contained herein, the scope of work of any such contracts entered into by Tenant pursuant to this paragraph shall, at a minimum, comply with manufacturer’s recommended maintenance procedures for the optimal performance of the applicable equipment. Landlord shall, notwithstanding anything to the contrary contained in this Lease, have no obligation to perform any Tenant Maintenance Obligations. The Tenant Maintenance Obligations shall not include the right or obligation on the part of Tenant to make any structural and/or capital repairs or improvements to the Project, and Landlord shall, during any period that Tenant is responsible for the Tenant Maintenance Obligations, continue, as part of Operating Expenses, to be responsible, as provided in the immediately preceding paragraph, for capital repairs and replacements required to be made to the Project. If Tenant fails to maintain any portion of the Premises for which Tenant is responsible as part of the Tenant Maintenance Obligations in a manner reasonably acceptable to Landlord within the requirements of this Lease, Landlord shall have the right, but not the obligation, to provide Tenant with written notice thereof and to assume the Tenant Maintenance Obligations if Tenant does not cure Tenant’s failure within 10 days after receipt of such notice.

15. Mechanic’s Liens. Tenant shall discharge, by bond or otherwise, any mechanic’s lien filed against the Premises or against the Project for work claimed to have been done for, or materials claimed to have been furnished to, Tenant within 10 days after the filing thereof, at Tenant’s sole cost and shall otherwise keep the Premises and the Project free from any liens arising out of work performed, materials furnished or obligations incurred by Tenant. Should Tenant fail to discharge any lien described herein, Landlord shall have the right, but not the obligation, to pay such claim or post a bond or otherwise provide security to eliminate the lien as a claim against title to the Project and the cost thereof shall be immediately due from Tenant as Additional Rent. If Tenant shall lease or finance the acquisition of office equipment, furnishings, or other personal property of a removable nature utilized by Tenant in the operation of Tenant’s business, Tenant warrants that any Uniform Commercial Code Financing Statement filed as a matter of public record by any lessor or creditor of Tenant will upon its face or by exhibit thereto indicate that such Financing Statement is applicable only to removable personal property of Tenant located within the Premises. In no event shall the address of the Project be furnished on the statement without qualifying language as to applicability of the lien only to removable personal property, located in an identified suite held by Tenant.

16. Indemnification. Tenant hereby indemnifies and agrees to defend, save and hold Landlord, its officers, directors, employees, managers, agents, sub-agents, constituent entities and lease signators (collectively, “**Landlord Indemnified Parties**”) harmless from and against any and all Claims for injury or death to persons or damage to property occurring within or about the Premises or the Project arising directly or indirectly out of use or occupancy of the Premises or the Project (including, without limitation, any act, omission or neglect by Tenant or any Tenant’s Parties in or about the Premises or at the Project) or a breach or default by Tenant in the performance of any of its obligations hereunder, except to the extent caused by the willful misconduct or gross negligence of Landlord Indemnified Parties. Landlord shall not be liable to Tenant for, and Tenant assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Premises). Tenant further waives any and all Claims for injury to Tenant’s business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Landlord Indemnified Parties shall not be liable for any damages arising from any act, omission or neglect of any tenant in the Project or of any other third party or Tenant Parties. The provisions of this Section 16 shall survive the termination or expiration of this Lease.



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17. **Insurance.** Landlord shall maintain all risk property and, if applicable, sprinkler damage insurance covering the full replacement cost of the Project (including the Tenant Improvements and all other fixed and permanent improvements in the Premises paid for by Landlord, if any). Landlord shall further procure and maintain commercial general liability insurance with a single loss limit of not less than \$2,000,000 for bodily injury and property damage with respect to the Project. Landlord may, but is not obligated to, maintain such other insurance and additional coverages as it may deem necessary, including, but not limited to, flood, environmental hazard and earthquake, loss or failure of building equipment, errors and omissions, rental loss during the period of repair or rebuilding, workers' compensation insurance and fidelity bonds for employees employed to perform services and insurance for any improvements installed by Tenant or which are in addition to the standard improvements customarily furnished by Landlord without regard to whether or not such are made a part of the Project. All such insurance shall be included as part of the Operating Expenses. The Project may be included in a blanket policy (in which case the cost of such insurance allocable to the Project will be determined by Landlord based upon the insurer's cost calculations). Tenant shall also reimburse Landlord for any increased premiums or additional insurance which Landlord reasonably deems necessary as a result of Tenant's use of the Premises.

Tenant, at its sole cost and expense, shall maintain during the Term: all risk property insurance with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Premises by Tenant at Tenant's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with employers liability limits of \$1,000,000 bodily injury by accident – each accident, \$1,000,000 bodily injury by disease – policy limit, and \$1,000,000 bodily injury by disease – each employee; and commercial general liability insurance, with a minimum limit of not less than \$4,000,000 per occurrence for bodily injury and property damage with respect to the Premises. For the avoidance of doubt, the policy of all risk property insurance required to be maintained by Tenant pursuant to the immediately preceding sentence shall not include coverage for the Tenant Improvements or any other fixed and permanent improvements in the Premises paid for by Landlord, if any. The commercial general liability insurance maintained by Tenant shall name Alexandria Real Estate Equities, Inc., and Landlord, its officers, directors, employees, managers, agents, sub-agents, constituent entities and lease signators (collectively, “**Landlord Insured Parties**”), as additional insureds; insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in “Best's Insurance Guide”; shall not be cancelable for nonpayment of premium unless 30 days prior written notice shall have been given to Landlord from the insurer; not contain a hostile fire exclusion; contain a contractual liability endorsement; and provide primary coverage to Landlord Insured Parties (any policy issued to Landlord Insured Parties providing duplicate or similar coverage shall be deemed excess over Tenant's policies, regardless of limits). Copies of such policies (if requested by Landlord), or certificates of insurance showing the limits of coverage required hereunder and showing Landlord as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Landlord by Tenant (i) concurrent with Tenant's delivery to Landlord of a copy of this Lease executed by Tenant, and (ii) prior to each renewal of said insurance. Tenant's policy may be a “blanket policy” with an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Tenant shall, at least 5 days prior to the expiration of such policies, furnish Landlord with renewal certificates.

In each instance where insurance is to name Landlord as an additional insured, Tenant shall upon written request of Landlord also designate and furnish certificates so evidencing Landlord as additional insured to: (i) any lender of Landlord holding a security interest in the Project or any portion thereof, (ii) the landlord under any lease wherein Landlord is tenant of the real property on which the Project is located, if the interest of Landlord is or shall become that of a tenant under a ground or other underlying lease rather than that of a fee owner, and/or (iii) any management company retained by Landlord to manage the Project.

The property insurance obtained by Landlord and Tenant shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Landlord or Tenant, and their respective officers, directors, employees, managers, agents, invitees and contractors (“**Related Parties**”), in connection with any loss or damage thereby insured against. Neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under property



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insurance required to be maintained hereunder, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Landlord and its respective Related Parties shall not be liable for, and Tenant hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Tenant or any person claiming through Tenant resulting from any accident or occurrence in or upon the Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Landlord or Tenant shall be deemed not released but shall be secondary to the other's insurer.

Landlord may require insurance policy limits to be raised to conform with requirements of Landlord's lender and/or to bring coverage limits to levels then being generally required of new tenants within the Project.

18. Restoration. If, at any time during the Term, the Project or the Premises are damaged or destroyed by a fire or other insured casualty, Landlord shall notify Tenant within 60 days after discovery of such damage as to the amount of time Landlord reasonably estimates it will take to restore the Project or the Premises, as applicable (the "**Restoration Period**"). If the Restoration Period is estimated to exceed 12 months (the "**Maximum Restoration Period**"), Landlord may, in such notice, elect to terminate this Lease as of the date that is 75 days after the date of discovery of such damage or destruction; provided, however, that notwithstanding Landlord's election to restore, Tenant may elect to terminate this Lease by written notice to Landlord delivered within 5 business days of receipt of a notice from Landlord estimating a Restoration Period for the Premises longer than the Maximum Restoration Period. Unless either Landlord or Tenant so elects to terminate this Lease, Landlord shall, subject to receipt of sufficient insurance proceeds (with any deductible to be treated as a current Operating Expense), promptly restore the Premises (excluding the improvements installed by Tenant or by Landlord and paid for by Tenant), subject to delays arising from the collection of insurance proceeds, from Force Majeure events or as needed to obtain any license, clearance or other authorization of any kind required to enter into and restore the Premises issued by any Governmental Authority having jurisdiction over the use, storage, handling, treatment, generation, release, disposal, removal or remediation of Hazardous Materials (as defined in Section 30) in, on or about the Premises (collectively referred to herein as "**Hazardous Materials Clearances**"); provided, however, that if repair or restoration of the Premises is not substantially complete as of the end of the Maximum Restoration Period or, if longer, the Restoration Period, Landlord may, in its sole and absolute discretion, elect not to proceed with such repair and restoration, or Tenant may by written notice to Landlord delivered within 5 business days of the expiration of the Maximum Restoration Period or, if longer, the Restoration Period, elect to terminate this Lease, in which event Landlord shall be relieved of its obligation to make such repairs or restoration and this Lease shall terminate as of the date that is 75 days after the later of: (i) discovery of such damage or destruction, or (ii) the date all required Hazardous Materials Clearances are obtained, but Landlord shall retain any Rent paid and the right to any Rent payable by Tenant prior to such election by Landlord or Tenant.

Tenant, at its expense, shall promptly perform, subject to delays arising from the collection of insurance proceeds, from Force Majeure events or to obtain Hazardous Material Clearances, all repairs or restoration not required to be done by Landlord and shall promptly re-enter the Premises and commence doing business in accordance with this Lease. Notwithstanding the foregoing, either Landlord or Tenant may terminate this Lease upon written notice to the other if the Premises are damaged during the last year of the Term and Landlord reasonably estimates that it will take more than 2 months to repair such damage; provided, however, that such notice is delivered within 10 business days after the date that Landlord provides Tenant with written notice of the estimated Restoration Period. Notwithstanding anything to the contrary contained herein, Landlord shall also have the right to terminate this Lease if insurance proceeds are not available for such restoration. Rent shall be abated from the date all required Hazardous Material Clearances are obtained until the Premises are repaired and restored, in the proportion which the area of the Premises, if any, which is not usable by Tenant bears to the total area of the Premises, unless Landlord provides Tenant with other space during the period of repair that is suitable for the temporary conduct of Tenant's business. In the event that no Hazardous Material Clearances are required to be obtained by Tenant with respect to the Premises, rent abatement shall commence on the date of discovery of the damage or destruction. Such abatement shall be the sole remedy of Tenant, and except as provided in this Section 18, Tenant waives any right to terminate this Lease by reason of damage or casualty loss.



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The provisions of this Lease, including this Section 18, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Premises, or any other portion of the Project, and any statute or regulation which is now or may hereafter be in effect shall have no application to this Lease or any damage or destruction to all or any part of the Premises or any other portion of the Project, the parties hereto expressly agreeing that this Section 18 sets forth their entire understanding and agreement with respect to such matters.

19. Condemnation. If the whole or any material part of the Premises or the Project is taken for any public or quasi-public use under governmental law, ordinance, or regulation, or by right of eminent domain, or by private purchase in lieu thereof (a “**Taking**” or “**Taken**”), and the Taking would in Landlord’s reasonable judgment, either prevent or materially interfere with Tenant’s use of the Premises or materially interfere with or impair Landlord’s ownership or operation of the Project, then upon written notice by Landlord this Lease shall terminate and Rent shall be apportioned as of said date. If part of the Premises shall be Taken, and this Lease is not terminated as provided above, Landlord shall promptly restore the Premises and the Project as nearly as is commercially reasonable under the circumstances to their condition prior to such partial Taking and the rentable square footage of the Building, the rentable square footage of the Premises, Tenant’s Share of Operating Expenses and the Rent payable hereunder during the unexpired Term shall be reduced to such extent as may be fair and reasonable under the circumstances. Upon any such Taking, Landlord shall be entitled to receive the entire price or award from any such Taking without any payment to Tenant, and Tenant hereby assigns to Landlord Tenant’s interest, if any, in such award. Tenant shall have the right, to the extent that same shall not diminish Landlord’s award, to make a separate claim against the condemning authority (but not Landlord) for such compensation as may be separately awarded or recoverable by Tenant for moving expenses and damage to Tenant’s trade fixtures, if a separate award for such items is made to Tenant. Tenant hereby waives any and all rights it might otherwise have pursuant to any provision of state law to terminate this Lease upon a partial Taking of the Premises or the Project.

20. Events of Default. Each of the following events shall be a default (“**Default**”) by Tenant under this Lease:

(a) **Payment Defaults.** Tenant shall fail to pay any installment of Rent or any other payment hereunder when due; provided, however, that Landlord will give Tenant notice and an opportunity to cure any failure to pay Rent within 5 days of any such notice not more than once in any 12 month period and Tenant agrees that such notice shall be in lieu of and not in addition to, or shall be deemed to be, any notice required by law.

(b) **Insurance.** Any insurance required to be maintained by Tenant pursuant to this Lease shall be canceled or terminated or shall expire or shall be reduced or materially changed, or Landlord shall receive a notice of nonrenewal of any such insurance and Tenant shall fail to obtain replacement insurance at least 10 days before the expiration of the current coverage.

(c) **Abandonment.** Tenant shall abandon the Premises. Tenant shall not be deemed to have abandoned the Premises if Tenant provides Landlord with reasonable advance notice prior to vacating and, at the time of vacating the Premises, (i) Tenant completes Tenant’s obligations under the Decommissioning and HazMat Closure Plan in compliance with Section 28, (ii) Tenant has obtained the release of the Premises of all Hazardous Materials Clearances and the Premises are free from any residual impact from the Tenant HazMat Operations and provides reasonably detailed documentation to Landlord confirming such matters, (iii) Tenant has made reasonable arrangements with Landlord for the security of the Premises for the balance of the Term, and (iv) Tenant continues during the balance of the Term to satisfy and perform all of Tenant’s obligations under this Lease as they come due.



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(d) **Improper Transfer.** Tenant shall assign, sublease or otherwise transfer or attempt to transfer all or any portion of Tenant's interest in this Lease or the Premises except as expressly permitted herein, or Tenant's interest in this Lease shall be attached, executed upon, or otherwise judicially seized and such action is not released within 90 days of the action.

(e) **Liens.** Tenant shall fail to discharge or otherwise obtain the release of any lien placed upon the Premises in violation of this Lease within 10 days after any such lien is filed against the Premises.

(f) **Insolvency Events.** Tenant or any guarantor or surety of Tenant's obligations hereunder shall: (A) make a general assignment for the benefit of creditors; (B) commence any case, proceeding or other action seeking to have an order for relief entered on its behalf as a debtor or to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, adjustment, liquidation, dissolution or composition of it or its debts or seeking appointment of a receiver, trustee, custodian or other similar official for it or for all or of any substantial part of its property (collectively a "**Proceeding for Relief**"); (C) become the subject of any Proceeding for Relief which is not dismissed within 90 days of its filing or entry; or (D) die or suffer a legal disability (if Tenant, guarantor, or surety is an individual) or be dissolved or otherwise fail to maintain its legal existence (if Tenant, guarantor or surety is a corporation, partnership or other entity).

(g) **Estoppel Certificate or Subordination Agreement.** Tenant fails to execute any document required from Tenant under Sections 23 or 27 within 10 days after a second notice requesting such document.

(h) **Other Defaults.** Tenant shall fail to comply with any provision of this Lease other than those specifically referred to in this Section 20, and, except as otherwise expressly provided herein, such failure shall continue for a period of 30 days after written notice thereof from Landlord to Tenant.

Any notice given under Section 20(h) hereof shall: (i) specify the alleged default, (ii) demand that Tenant cure such default, (iii) be in lieu of, and not in addition to, or shall be deemed to be, any notice required under any provision of applicable law, and (iv) not be deemed a forfeiture or a termination of this Lease unless Landlord elects otherwise in such notice; provided that if the nature of Tenant's default pursuant to Section 20(h) is such that it cannot be cured by the payment of money and reasonably requires more than 30 days to cure, then Tenant shall not be deemed to be in default if Tenant commences such cure within said 30 day period and thereafter diligently prosecutes the same to completion; provided, however, that such cure shall be completed no later than 60 days from the date of Landlord's notice.

21. Landlord's Remedies.

(a) **Payment By Landlord; Interest.** Upon a Default by Tenant hereunder, Landlord may, without waiving or releasing any obligation of Tenant hereunder, make such payment or perform such act. All sums so paid or incurred by Landlord, together with interest thereon, from the date such sums were paid or incurred, at the annual rate equal to 12% per annum or the highest rate permitted by law (the "**Default Rate**"), whichever is less, shall be payable to Landlord on demand as Additional Rent. Nothing herein shall be construed to create or impose a duty on Landlord to mitigate any damages resulting from Tenant's Default hereunder.

(b) **Late Payment Rent.** Late payment by Tenant to Landlord of Rent and other sums due will cause Landlord to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult and impracticable to ascertain. Such costs include, but are not limited to, processing and accounting charges and late charges which may be imposed on Landlord under any Mortgage covering the Premises. Therefore, if any installment of Rent due from Tenant is not received by Landlord within 5 days after the date such payment is due, Tenant shall pay to Landlord an additional sum equal to 6% of the overdue Rent as a late charge. Notwithstanding the foregoing, before assessing a late charge the first time in any calendar year, Landlord shall provide Tenant written notice of the delinquency and will waive the right if Tenant pays such delinquency within 5 days thereafter. The parties agree that this late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. In addition to the late charge, Rent not paid when due shall bear interest at the Default Rate from the 5th day after the date due until paid.



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(c) **Remedies.** Upon the occurrence of a Default, Landlord, at its option, without further notice or demand to Tenant, shall have in addition to all other rights and remedies provided in this Lease, at law or in equity, the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever.

(i) Terminate this Lease, or at Landlord's option, Tenant's right to possession only, in which event Tenant shall immediately surrender the Premises to Landlord, and if Tenant fails to do so, Landlord may, without prejudice to any other remedy which it may have for possession or arrearages in rent, enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, without being liable for prosecution or any claim for damages therefor;

(ii) Upon any termination of this Lease, whether pursuant to the foregoing Section 21(c)(i) or otherwise, Landlord may recover from Tenant the following:

- (A) The worth at the time of award of any unpaid rent which has been earned at the time of such termination; plus
- (B) The worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus
- (C) The worth at the time of award of the amount by which the unpaid rent for the balance of the Term after the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus
- (D) Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, specifically including, but not limited to, brokerage commissions and advertising expenses incurred, reasonable expenses of remodeling the Premises or any portion thereof for a new tenant, whether for the same or a different use, and any special concessions made to obtain a new tenant; and
- (E) At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by applicable law.

The term "**rent**" as used in this Section 21 shall be deemed to be and to mean all sums of every nature required to be paid by Tenant pursuant to the terms of this Lease, whether to Landlord or to others. As used in Sections 21(c)(ii)(A) and (B), above, the "**worth at the time of award**" shall be computed by allowing interest at the Default Rate. As used in Section 21(c)(ii)(C), above, the "**worth at the time of award**" shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus 1%.

(iii) Landlord may continue this Lease in effect after Tenant's Default and recover rent as it becomes due (Landlord and Tenant hereby agreeing that Tenant has the right to sublet or assign hereunder, subject only to reasonable limitations). Accordingly, if Landlord does not elect to terminate this Lease following a Default by Tenant, Landlord may, from time to time, without terminating this Lease, enforce all of its rights and remedies hereunder, including the right to recover all Rent as it becomes due.



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(iv) Whether or not Landlord elects to terminate this Lease following a Default by Tenant, Landlord shall have the right to terminate any and all subleases, licenses, concessions or other consensual arrangements for possession entered into by Tenant and affecting the Premises or may, in Landlord's sole discretion, succeed to Tenant's interest in such subleases, licenses, concessions or arrangements. Upon Landlord's election to succeed to Tenant's interest in any such subleases, licenses, concessions or arrangements, Tenant shall, as of the date of notice by Landlord of such election, have no further right to or interest in the rent or other consideration receivable thereunder.

(v) Independent of the exercise of any other remedy of Landlord hereunder or under applicable law, Landlord may conduct an environmental test of the Premises as generally described in Section 30(d) hereof, at Tenant's expense.

(d) **Effect of Exercise.** Exercise by Landlord of any remedies hereunder or otherwise available shall not be deemed to be an acceptance of surrender of the Premises and/or a termination of this Lease by Landlord, it being understood that such surrender and/or termination can be effected only by the express written agreement of Landlord and Tenant. Any law, usage, or custom to the contrary notwithstanding, Landlord shall have the right at all times to enforce the provisions of this Lease in strict accordance with the terms hereof; and the failure of Landlord at any time to enforce its rights under this Lease strictly in accordance with same shall not be construed as having created a custom in any way or manner contrary to the specific terms, provisions, and covenants of this Lease or as having modified the same and shall not be deemed a waiver of Landlord's right to enforce one or more of its rights in connection with any subsequent default. A receipt by Landlord of Rent or other payment with knowledge of the breach of any covenant hereof shall not be deemed a waiver of such breach, and no waiver by Landlord of any provision of this Lease shall be deemed to have been made unless expressed in writing and signed by Landlord. To the greatest extent permitted by law, Tenant waives the service of notice of Landlord's intention to re-enter, re-take or otherwise obtain possession of the Premises as provided in any statute, or to institute legal proceedings to that end, and also waives all right of redemption in case Tenant shall be dispossessed by a judgment or by warrant of any court or judge. Any reletting of the Premises or any portion thereof shall be on such terms and conditions as Landlord in its sole discretion may determine. Landlord shall not be liable for, nor shall Tenant's obligations hereunder be diminished because of, Landlord's failure to relet the Premises or collect rent due in respect of such reletting or otherwise to mitigate any damages arising by reason of Tenant's Default.

22. Assignment and Subletting.

(a) **General Prohibition.** Without Landlord's prior written consent subject to and on the conditions described in this Section 22, Tenant shall not, directly or indirectly, voluntarily or by operation of law, assign this Lease or sublease the Premises or any part thereof or mortgage, pledge, or hypothecate its leasehold interest or grant any concession or license within the Premises, and any attempt to do any of the foregoing shall be void and of no effect. If Tenant is a corporation, partnership or limited liability company, the shares or other ownership interests thereof which are not actively traded upon a stock exchange or in the over-the-counter market, a transfer or series of transfers whereby 25% or more of the issued and outstanding shares or other ownership interests of such corporation are, or voting control is, transferred (but excepting transfers upon deaths of individual owners) from a person or persons or entity or entities which were owners thereof at time of execution of this Lease to persons or entities who were not owners of shares or other ownership interests of the corporation, partnership or limited liability company at time of execution of this Lease, shall be deemed an assignment of this Lease requiring the consent of Landlord as provided in this Section 22.

(b) **Permitted Transfers.** If Tenant desires to assign, sublease, hypothecate or otherwise transfer this Lease or sublet the Premises, then at least 15 business days, but not more than 45 business days, before the date Tenant desires the assignment or sublease to be effective (the "**Assignment Date**"), Tenant shall give Landlord a notice (the "**Assignment Notice**") containing such information about the proposed assignee or sublessee, including the proposed use of the Premises and any Hazardous Materials



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proposed to be used, stored handled, treated, generated in or released or disposed of from the Premises, the Assignment Date, any relationship between Tenant and the proposed assignee or sublessee, and all material terms and conditions of the proposed assignment or sublease, including a copy of any proposed assignment or sublease in its final form, and such other information as Landlord may deem reasonably necessary or appropriate to its consideration whether to grant its consent. Landlord may, by giving written notice to Tenant within 15 business days after receipt of the Assignment Notice: (i) grant such consent (provided that Landlord shall further have the right to review and approve or disapprove the proposed form of sublease prior to the effective date of any such subletting), (ii) refuse such consent, in its reasonable discretion; or (iii) terminate this Lease with respect to the space described in the Assignment Notice as of the Assignment Date (an “**Assignment Termination**”). Among other reasons, it shall be reasonable for Landlord to withhold its consent in any of these instances: (1) the proposed assignee or subtenant is a governmental agency; (2) in Landlord’s reasonable judgment, the use of the Premises by the proposed assignee or subtenant would entail any alterations that would lessen the value of the leasehold improvements in the Premises, or would require increased services by Landlord; (3) in Landlord’s reasonable judgment, the proposed assignee or subtenant is engaged in areas of scientific research or other business concerns that are controversial such that they may (i) attract or cause negative publicity for or about the Building or the Project, (ii) negatively affect the reputation of the Building, the Project or Landlord, (iii) attract protestors to the Building or the Project, or (iv) lessen the attractiveness of the Building or the Project to any tenants or prospective tenants, purchasers or lenders; (4) in Landlord’s reasonable judgment, the proposed assignee or subtenant lacks the creditworthiness to support the financial obligations it will incur under the proposed assignment or sublease; (5) in Landlord’s reasonable judgment, the character, reputation, or business of the proposed assignee or subtenant is inconsistent with the desired tenant-mix or the quality of other tenancies in the Project or is inconsistent with the type and quality of the nature of the Building; (6) Landlord has received from any prior landlord to the proposed assignee or subtenant a negative report concerning such prior landlord’s experience with the proposed assignee or subtenant; (7) Landlord has experienced previous defaults by or is in litigation with the proposed assignee or subtenant; (8) the use of the Premises by the proposed assignee or subtenant will violate any applicable Legal Requirement; (9) the proposed assignee or subtenant is an entity with whom Landlord is actively negotiating to lease space in the Project and Landlord has sufficient space available for the proposed assignee or subtenant’s needs; or (10) the assignment or sublease is prohibited by Landlord’s lender. If Landlord delivers notice of its election to exercise an Assignment Termination, Tenant shall have the right to withdraw such Assignment Notice by written notice to Landlord of such election within 5 business days after Landlord’s notice electing to exercise the Assignment Termination. If Tenant withdraws such Assignment Notice, this Lease shall continue in full force and effect. If Tenant does not withdraw such Assignment Notice, this Lease, and the term and estate herein granted, shall terminate as of the Assignment Date with respect to the space described in such Assignment Notice. No failure of Landlord to exercise any such option to terminate this Lease, or to deliver a timely notice in response to the Assignment Notice, shall be deemed to be Landlord’s consent to the proposed assignment, sublease or other transfer. Tenant shall pay to Landlord a fee equal to Two Thousand Five Hundred Dollars (\$2,500) in connection with its consideration of any Assignment Notice and/or its preparation or review of any consent documents. Notwithstanding the foregoing, Landlord’s consent to an assignment of this Lease or a subletting of any portion of the Premises to any entity controlling, controlled by or under common control with Tenant (a “**Control Permitted Assignment**”) shall not be required, provided that Landlord shall have the right to approve the form of any such sublease or assignment. In addition, Tenant shall have the right to assign this Lease, upon 15 days prior written notice to Landlord but without obtaining Landlord’s prior written consent, to a corporation or other entity which is a successor-in-interest to Tenant, by way of merger, consolidation or corporate reorganization, or by the purchase of all or substantially all of the assets or the ownership interests of Tenant provided that (i) such merger or consolidation, or such acquisition or assumption, as the case may be, is for a good business purpose and not principally for the purpose of transferring this Lease, and (ii) the net worth (as determined in accordance with generally accepted accounting principles (“**GAAP**”)) of the assignee is not less than the greater of the net worth (as determined in accordance with GAAP) of Tenant as of (A) the Commencement Date, or (B) as of the date of Tenant’s most current quarterly or annual financial statements, and (iii) such assignee shall agree in writing to assume all of the terms, covenants and conditions of this Lease (a “**Corporate Permitted Assignment**”). Control Permitted Assignments and Corporate Permitted Assignments are hereinafter referred to as “**Permitted Assignments**.”



(c) **Additional Conditions.** As a condition to any such assignment or subletting, whether or not Landlord's consent is required, Landlord may require:

(i) that any assignee or subtenant agree, in writing at the time of such assignment or subletting, that if Landlord gives such party notice that Tenant is in Default under this Lease, such party shall thereafter make all payments otherwise due Tenant directly to Landlord, which payments will be received by Landlord without any liability except to credit such payment against those due under this Lease, and any such third party shall agree to attorn to Landlord or its successors and assigns should this Lease be terminated for any reason; provided, however, in no event shall Landlord or its successors or assigns be obligated to accept such attornment; and

(ii) A list of Hazardous Materials, certified by the proposed assignee or sublessee to be true and correct, which the proposed assignee or sublessee intends to use, store, handle, treat, generate in or release or dispose of from the Premises, together with copies of all documents relating to such use, storage, handling, treatment, generation, release or disposal of Hazardous Materials by the proposed assignee or subtenant in the Premises or on the Project, prior to the proposed assignment or subletting, including, without limitation: permits; approvals; reports and correspondence; storage and management plans; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given its written consent to do so, which consent may be withheld in Landlord's sole and absolute discretion); and all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks. Neither Tenant nor any such proposed assignee or subtenant is required, however, to provide Landlord with any portion(s) of the such documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities.

(d) **No Release of Tenant, Sharing of Excess Rents.** Notwithstanding any assignment or subletting, Tenant and any guarantor or surety of Tenant's obligations under this Lease shall at all times remain fully and primarily responsible and liable for the payment of Rent and for compliance with all of Tenant's other obligations under this Lease. If the rent due and payable by a sublessee or assignee (or a combination of the rental payable under such sublease or assignment plus any bonus or other consideration therefor or incident thereto in any form) exceeds the Base Rent and Operating Expenses payable under this Lease with respect to the applicable portion of the Premises (excluding however, any Rent payable under this Section) and actual and reasonable brokerage fees, legal costs and any design or construction fees directly related to and required pursuant to the terms of any such sublease ("**Excess Rent**"), then Tenant shall be bound and obligated to pay Landlord as Additional Rent hereunder 50% of such Excess Rent within 10 days following receipt thereof by Tenant. If Tenant shall sublet the Premises or any part thereof, Tenant hereby immediately and irrevocably assigns to Landlord, as security for Tenant's obligations under this Lease, all rent from any such subletting, and Landlord as assignee and as attorney-in-fact for Tenant, or a receiver for Tenant appointed on Landlord's application, may collect such rent and apply it toward Tenant's obligations under this Lease; except that, until the occurrence of a Default, Tenant shall have the right to collect such rent.

(e) **No Waiver.** The consent by Landlord to an assignment or subletting shall not relieve Tenant or any assignees of this Lease or any sublessees of the Premises from obtaining the consent of Landlord to any further assignment or subletting nor shall it release Tenant or any assignee or sublessee of Tenant from full and primary liability under this Lease. The acceptance of Rent hereunder, or the acceptance of performance of any other term, covenant, or condition thereof, from any other person or entity shall not be deemed to be a waiver of any of the provisions of this Lease or a consent to any subletting, assignment or other transfer of the Premises.

(f) **Prior Conduct of Proposed Transferee.** Notwithstanding any other provision of this Section 22, if (i) the proposed assignee or sublessee of Tenant has been required by any prior landlord, lender or Governmental Authority to take remedial action in connection with Hazardous Materials



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contaminating a property, where the contamination resulted from such party's action or use of the property in question, (ii) the proposed assignee or sublessee is subject to an enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority), or (iii) because of the existence of a pre-existing environmental condition in the vicinity of or underlying the Project, the risk that Landlord would be targeted as a responsible party in connection with the remediation of such pre-existing environmental condition would be materially increased or exacerbated by the proposed use of Hazardous Materials by such proposed assignee or sublessee, Landlord shall have the absolute right to refuse to consent to any assignment or subletting to any such party.

23. Estoppel Certificate. Tenant shall, within 10 business days of written notice from Landlord, execute, acknowledge and deliver a statement in writing in any form reasonably requested by a proposed lender or purchaser, (i) certifying that this Lease is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Lease as so modified is in full force and effect) and the dates to which the rental and other charges are paid in advance, if any, (ii) acknowledging that, to Tenant's actual knowledge, there are not any uncured defaults on the part of Landlord hereunder, or specifying such defaults if any are claimed, and (iii) setting forth such further information with respect to the status of this Lease or the Premises as may be requested thereon. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the real property of which the Premises are a part. Tenant's failure to deliver such statement within 5 days after Tenant's receipt of a second written notice from Landlord shall, at the option of Landlord, constitute a Default under this Lease, and, in any event, shall be conclusive upon Tenant that this Lease is in full force and effect and without modification except as may be represented by Landlord in any certificate prepared by Landlord and delivered to Tenant for execution.

24. Quiet Enjoyment. So long as Tenant is not in Default under this Lease, Tenant shall, subject to the terms of this Lease, at all times during the Term, have peaceful and quiet enjoyment of the Premises against any person claiming by, through or under Landlord.

25. Prorations. All prorations required or permitted to be made hereunder shall be made on the basis of a 360 day year and 30 day months.

26. Rules and Regulations. Tenant shall, at all times during the Term and any extension thereof, comply with all reasonable rules and regulations at any time or from time to time established by Landlord covering use of the Premises and the Project. Such rules and regulations may include, without limitation, rules and regulations relating to the use of the Project Amenities and/or rules and regulations which are intended to encourage social distancing, promote and protect health and physical well-being within the Building and the Project and/or intended to limit the spread of Infectious Conditions. The current rules and regulations are attached hereto as **Exhibit E**. If there is any conflict between said rules and regulations and other provisions of this Lease, the terms and provisions of this Lease shall control. Landlord shall not have any liability or obligation for the breach of any rules or regulations by other tenants in the Project and shall not enforce such rules and regulations in a discriminatory manner.

27. Subordination. This Lease and Tenant's interest and rights hereunder are hereby made and shall be subject and subordinate at all times to the lien of any Mortgage now existing or hereafter created on or against the Project or the Premises, and all amendments, restatements, renewals, modifications, consolidations, refinancing, assignments and extensions thereof, without the necessity of any further instrument or act on the part of Tenant; provided, however that so long as there is no Default hereunder, Tenant's right to possession of the Premises shall not be disturbed by the Holder of any such Mortgage. Tenant agrees, at the election of the Holder of any such Mortgage, to attorn to any such Holder. Tenant agrees upon demand to execute, acknowledge and deliver such instruments, confirming such subordination, and such instruments of attornment as shall be requested by any such Holder, provided any such instruments contain appropriate non-disturbance provisions assuring Tenant's quiet enjoyment of the Premises as set forth in Section 24 hereof. Notwithstanding the foregoing, any such Holder may at any



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time subordinate its Mortgage to this Lease, without Tenant's consent, by notice in writing to Tenant, and thereupon this Lease shall be deemed prior to such Mortgage without regard to their respective dates of execution, delivery or recording and in that event such Holder shall have the same rights with respect to this Lease as though this Lease had been executed prior to the execution, delivery and recording of such Mortgage and had been assigned to such Holder. The term "**Mortgage**" whenever used in this Lease shall be deemed to include deeds of trust, security assignments and any other encumbrances, and any reference to the "**Holder**" of a Mortgage shall be deemed to include the beneficiary under a deed of trust.

28. Surrender. Upon the expiration of the Term or earlier termination of Tenant's right of possession, Tenant shall surrender the Premises to Landlord in the same as received or, subject to any Alterations or Installations permitted by Landlord to remain in the Premises, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Premises by any person other than a Landlord or Landlord's employees, agent or contractors (collectively, "**Tenant HazMat Operations**") and released of all Hazardous Materials Clearances, broom clean, ordinary wear and tear and casualty loss and condemnation covered by Sections 18 and 19 excepted. At least 3 months prior to the surrender of the Premises or such earlier date as Tenant may elect to cease operations at the Premises, Tenant shall deliver to Landlord a narrative description of the actions proposed (or required by any Governmental Authority) to be taken by Tenant in order to surrender the Premises (including any Installations permitted by Landlord to remain in the Premises) at the expiration or earlier termination of the Term, free from any residual impact from the Tenant HazMat Operations and otherwise released for unrestricted use and occupancy (the "**Decommissioning and HazMat Closure Plan**"). Such Decommissioning and HazMat Closure Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of any Tenant Party with respect to the Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Premises, and shall be subject to the review and approval of Landlord's environmental consultant. In connection with the review and approval of the Decommissioning and HazMat Closure Plan, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such additional non-proprietary information concerning Tenant HazMat Operations as Landlord shall request. On or before such surrender, Tenant shall deliver to Landlord evidence that the approved Decommissioning and HazMat Closure Plan shall have been satisfactorily completed and Landlord shall have the right, subject to reimbursement at Tenant's expense as set forth below, to cause Landlord's environmental consultant to inspect the Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Premises are, as of the effective date of such surrender or early termination of this Lease, free from any residual impact from Tenant HazMat Operations. Tenant shall reimburse Landlord, as Additional Rent, for the actual, reasonable out-of-pocket expense incurred by Landlord for Landlord's environmental consultant to review and approve the Decommissioning and HazMat Closure Plan and to visit the Premises and verify satisfactory completion of the same, which cost shall not exceed \$5,000. Landlord shall have the unrestricted right to deliver such Decommissioning and HazMat Closure Plan and any report by Landlord's environmental consultant with respect to the surrender of the Premises to third parties.

If Tenant shall fail to prepare or submit a Decommissioning and HazMat Closure Plan approved by Landlord, or if Tenant shall fail to complete the approved Decommissioning and HazMat Closure Plan, or if such Decommissioning and HazMat Closure Plan, whether or not approved by Landlord, shall fail to adequately address any residual effect of Tenant HazMat Operations in, on or about the Premises, Landlord shall have the right to take such actions as Landlord may deem reasonable or appropriate to assure that the Premises and the Project are surrendered free from any residual impact from Tenant HazMat Operations, the cost of which actions shall be reimbursed by Tenant as Additional Rent, without regard to the limitation set forth in the first paragraph of this Section 28.

Tenant shall immediately return to Landlord all keys and/or access cards to parking, the Project, restrooms or all or any portion of the Premises furnished to or otherwise procured by Tenant. If any such access card or key is lost, Tenant shall pay to Landlord, at Landlord's election, either the cost of replacing such lost access card or key or the cost of reprogramming the access security system in which such access card was used or changing the lock or locks opened by such lost key. Any Tenant's Property, Alterations and property not so removed by Tenant as permitted or required herein shall be deemed abandoned and may be stored, removed, and disposed of by Landlord at Tenant's expense, and Tenant waives all claims



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against Landlord for any damages resulting from Landlord's retention and/or disposition of such property. All obligations of Tenant hereunder not fully performed as of the termination of the Term, including the obligations of Tenant under Section 30 hereof, shall survive the expiration or earlier termination of the Term, including, without limitation, indemnity obligations, payment obligations with respect to Rent and obligations concerning the condition and repair of the Premises.

29. Waiver of Jury Trial. TO THE EXTENT PERMITTED BY LAW, TENANT AND LANDLORD WAIVE ANY RIGHT TO TRIAL BY JURY OR TO HAVE A JURY PARTICIPATE IN RESOLVING ANY DISPUTE, WHETHER SOUNDING IN CONTRACT, TORT, OR OTHERWISE, BETWEEN LANDLORD AND TENANT ARISING OUT OF THIS LEASE OR ANY OTHER INSTRUMENT, DOCUMENT, OR AGREEMENT EXECUTED OR DELIVERED IN CONNECTION HERewith OR THE TRANSACTIONS RELATED HERETO.

30. Environmental Requirements.

(a) **Prohibition/Compliance/Indemnity.** Tenant shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises or the Project in violation of applicable Environmental Requirements (as hereinafter defined) by Tenant or any Tenant Party. If Tenant breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Premises during the Term or any holding over results in contamination of the Premises, the Project or any adjacent property or if contamination of the Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Premises by anyone other than Landlord and Landlord's employees, agents and contractors otherwise occurs during the Term or any holding over, Tenant hereby indemnifies and shall defend and hold Landlord, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Premises or the Project, or the loss of, or restriction on, use of the Premises or any portion of the Project), expenses (including, without limitation, attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses which arise during or after the Term as a result of such contamination. This indemnification of Landlord by Tenant includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required by any federal, state or local Governmental Authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Premises, the Project or any adjacent property caused or permitted by Tenant or any Tenant Party results in any contamination of the Premises, the Project or any adjacent property, Tenant shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Premises, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Landlord's approval of such action shall first be obtained, which approval shall not unreasonably be withheld, conditioned or delayed so long as such actions would not potentially have any material adverse long-term or short-term effect on the Premises or the Project. Notwithstanding anything to the contrary contained in this Section 30, Tenant shall not be responsible for, and the indemnification and hold harmless obligation set forth in this paragraph shall not apply to (i) contamination in the Initial Premises which Tenant can prove existed in the Initial Premises prior to the Commencement Date, (ii) contamination in the Subsequent Premises which Tenant can prove existed in the Subsequent Premises prior to the Subsequent Premises Commencement Date, (iii) the presence of any Hazardous Materials in the Premises which Tenant can prove migrated from outside of the Premises into the Premises, or (iv) any contamination caused by Landlord or any Landlord's employees, agents and contractors; unless in any case, the presence of such Hazardous Materials (x) is the result of a breach by Tenant of any of its obligations under this Lease, or (y) was caused, contributed to or exacerbated by Tenant or any Tenant Party.



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(b) **Business.** Landlord acknowledges that it is not the intent of this Section 30 to prohibit Tenant from using the Premises for the Permitted Use. Tenant may operate its business according to prudent industry practices so long as the use or presence of Hazardous Materials is strictly and properly monitored according to all then applicable Environmental Requirements. As a material inducement to Landlord to allow Tenant to use Hazardous Materials in connection with its business, Tenant agrees to deliver to Landlord prior to the Commencement Date a list identifying each type of Hazardous Materials to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Premises (“**Hazardous Materials List**”). Upon Landlord’s request, or any time that Tenant is required to deliver a Hazardous Materials List to any Governmental Authority (e.g., the fire department) in connection with Tenant’s use or occupancy of the Premises, Tenant shall deliver to Landlord a copy of such Hazardous Materials List. Tenant shall deliver to Landlord true and correct copies of the following documents (the “**Haz Mat Documents**”) relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the Commencement Date, or if unavailable at that time, concurrent with the receipt from or submission to a Governmental Authority: permits; approvals; reports and correspondence; storage and management plans, notice of violations of any Legal Requirements; plans relating to the installation of any storage tanks to be installed in or under the Project (provided, said installation of tanks shall only be permitted after Landlord has given Tenant its written consent to do so, which consent may be withheld in Landlord’s sole and absolute discretion); all closure plans or any other documents required by any and all federal, state and local Governmental Authorities for any storage tanks installed in, on or under the Project for the closure of any such tanks; and a Decommissioning and HazMat Closure Plan (to the extent surrender in accordance with Section 28 cannot be accomplished in 3 months). Tenant is not required, however, to provide Landlord with any portion(s) of the Haz Mat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities. It is not the intent of this Section to provide Landlord with information which could be detrimental to Tenant’s business should such information become possessed by Tenant’s competitors.

(c) **Tenant Representation and Warranty.** Tenant hereby represents and warrants to Landlord that to Tenant’s knowledge (i) neither Tenant nor any of its legal predecessors has been required by any prior landlord, lender or Governmental Authority at any time to take remedial action in connection with Hazardous Materials contaminating a property which contamination was permitted by Tenant of such predecessor or resulted from Tenant’s or such predecessor’s action or use of the property in question, and (ii) Tenant is not subject to any enforcement order issued by any Governmental Authority in connection with the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials (including, without limitation, any order related to the failure to make a required reporting to any Governmental Authority). If Landlord determines that this representation and warranty was not true as of the date of this lease, Landlord shall have the right to terminate this Lease in Landlord’s sole and absolute discretion.

(d) **Testing.** Landlord shall have the right (but not more than once than once per year) to conduct annual tests of the Premises to determine whether any contamination of the Premises or the Project has occurred as a result of Tenant’s use. Tenant shall be required to pay the cost of such annual test of the Premises if there is violation of this Section 30 or if contamination for which Tenant is responsible under this Section 30 is identified; provided, however, that if Tenant conducts its own tests of the Premises using third party contractors and test procedures acceptable to Landlord which tests are certified to Landlord, Landlord shall accept such tests in lieu of the tests to be paid for by Tenant. In addition, at any time, and from time to time, prior to the expiration or earlier termination of the Term, Landlord shall have the right to conduct appropriate tests of the Premises and the Project to determine if contamination has occurred as a result of Tenant’s use of the Premises. In connection with such testing, upon the request of Landlord, Tenant shall deliver to Landlord or its consultant such non-proprietary information concerning the use of Hazardous Materials in or about the Premises by Tenant or any Tenant Party. If contamination has occurred for which Tenant is liable under this Section 30, Tenant shall pay all costs to conduct such tests. If no such contamination is found, Landlord shall pay the costs of such tests (which shall not constitute an Operating Expense). Landlord shall provide Tenant with a copy of all third party, non-confidential reports and tests of the Premises made by or on behalf of Landlord during the Term without representation or



warranty and subject to a confidentiality agreement. Tenant shall, at its sole cost and expense, promptly and satisfactorily remediate any environmental conditions identified by such testing in accordance with all Environmental Requirements. Landlord's receipt of or satisfaction with any environmental assessment in no way waives any rights which Landlord may have against Tenant.

(e) **Control Areas.** Tenant shall have the use of 100% of the control areas identified as control areas 1A, 1B, 2A and 2B on **Exhibit H** with respect to the first floor of the Building and 100% of the control area serving the second floor of the Building. For the avoidance of doubt, Tenant shall not have anything with respect to any other control areas at the Project.

(f) **Storage Tanks.** If storage tanks storing Hazardous Materials located on the Premises or the Project are used by Tenant or are hereafter placed on the Premises or the Project by Tenant, Tenant shall install, use, monitor, operate, maintain, upgrade and manage such storage tanks, maintain appropriate records, obtain and maintain appropriate insurance, implement reporting procedures, properly close any storage tanks, and take or cause to be taken all other actions necessary or required under applicable state and federal Legal Requirements, as such now exists or may hereafter be adopted or amended in connection with the installation, use, maintenance, management, operation, upgrading and closure of such storage tanks. Notwithstanding anything to the contrary contained herein, Tenant shall have no right to use or install any underground storage tanks at the Project.

(g) **Tenant's Obligations.** Tenant's obligations under this Section 30 shall survive the expiration or earlier termination of the Lease. During any period of time after the expiration or earlier termination of this Lease required by Tenant or Landlord to complete the removal from the Premises of any Hazardous Materials (including, without limitation, the release and termination of any licenses or permits restricting the use of the Premises and the completion of the approved Decommissioning and HazMat Closure Plan), Tenant shall continue to pay the full Rent in accordance with this Lease for any portion of the Premises not relet by Landlord in Landlord's sole discretion, which Rent shall be prorated daily.

(h) **Definitions.** As used herein, the term "**Environmental Requirements**" means all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any Governmental Authority regulating or relating to health, safety, or environmental conditions on, under, or about the Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. As used herein, the term "**Hazardous Materials**" means and includes any substance, material, waste, pollutant, or contaminant listed or defined as hazardous or toxic, or regulated by reason of its impact or potential impact on humans, animals and/or the environment under any Environmental Requirements, asbestos and petroleum, including crude oil or any fraction thereof, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas). As defined in Environmental Requirements, Tenant is and shall be deemed to be the "**operator**" of Tenant's "**facility**" and the "**owner**" of all Hazardous Materials brought on the Premises by Tenant or any Tenant Party, and the wastes, by-products, or residues generated, resulting, or produced therefrom.

31. **Tenant's Remedies/Limitation of Liability.** Landlord shall not be in default hereunder unless Landlord fails to perform any of its obligations hereunder within 30 days after written notice from Tenant specifying such failure (unless such performance will, due to the nature of the obligation, require a period of time in excess of 30 days, then after such period of time as is reasonably necessary so long as Landlord has commenced such cure and is diligently prosecuting the same to completion). Upon any default by Landlord, Tenant shall give notice by registered or certified mail to any Holder of a Mortgage covering the Premises and to any landlord of any lease of property in or on which the Premises are located and Tenant shall offer such Holder and/or landlord a reasonable opportunity to cure the default, including time to obtain possession of the Project by power of sale or a judicial action if such should prove necessary to effect a cure; provided Landlord shall have furnished to Tenant in writing the names and addresses of all such persons who are to receive such notices. All obligations of Landlord hereunder shall be construed as covenants, not conditions; and, except as may be otherwise expressly provided in this Lease, Tenant may not terminate this Lease for breach of Landlord's obligations hereunder.



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All obligations of Landlord under this Lease will be binding upon Landlord only during the period of its ownership of the Premises and not thereafter. The term “**Landlord**” in this Lease shall mean only the owner for the time being of the Premises. Upon the transfer by such owner of its interest in the Premises, such owner shall thereupon be released and discharged from all obligations of Landlord thereafter accruing, but such obligations shall be binding during the Term upon each new owner for the duration of such owner’s ownership.

32. Inspection and Access. Landlord and its agents, representatives, and contractors may enter the Premises at any reasonable time to inspect the Premises and to make such repairs as may be required or permitted pursuant to this Lease and for any other business purpose. Landlord and Landlord’s representatives may enter the Premises during business hours on not less than 48 hours advance written notice (except in the case of actual or apparent emergencies in which case no such notice shall be required and such entry may be at any time) for the purpose of effecting any such repairs, inspecting the Premises, showing the Premises to prospective purchasers and, during the last 12 months of the Term, to prospective tenants or for any other business purpose. Landlord may erect a suitable sign on the Premises stating the Premises are available to let or that the Project is available for sale. Landlord may grant easements, make public dedications, designate Common Areas and create restrictions on or about the Premises, provided that no such easement, dedication, designation or restriction materially, adversely affects Tenant’s use or occupancy of the Premises for the Permitted Use. At Landlord’s request, Tenant shall execute such instruments as may be necessary for such easements, dedications or restrictions. Tenant shall at all times, except in the case of emergencies, have the right to escort Landlord or its agents, representatives, contractors or guests while the same are in the Premises, provided such escort does not materially and adversely affect Landlord’s access rights hereunder.

Subject to the terms of this Section 32, Landlord may from time to time during the Term, during regular business hours and/or otherwise at times mutually acceptable to Landlord and Tenant, conduct third party tours of the Premises (“**Tours**”), which Tours may be held with not less than 2 business day’s advance notice.

33. Security. Tenant acknowledges and agrees that security devices and services, if any, while intended to deter crime may not in given instances prevent theft or other criminal acts and that Landlord is not providing any security services with respect to the Premises. Tenant agrees that Landlord shall not be liable to Tenant for, and Tenant waives any claim against Landlord with respect to, any loss by theft or any other damage suffered or incurred by Tenant in connection with any unauthorized entry into the Premises or any other breach of security with respect to the Premises. Tenant shall be solely responsible for the personal safety of Tenant’s officers, employees, agents, contractors, guests and invitees while any such person is in, on or about the Premises and/or the Project. Tenant shall at Tenant’s cost obtain insurance coverage to the extent Tenant desires protection against such criminal acts.

34. Force Majeure. Except for the payment of Rent, neither Landlord nor Tenant shall be held responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, sinkholes or subsidence, strikes, lockouts, or other labor disputes, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, local, regional or national epidemic or pandemic (including any Government Mandate), delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond their reasonable control (“**Force Majeure**”).

35. Brokers. Landlord and Tenant each represents and warrants that it has not dealt with any broker, agent or other person (collectively, “**Broker**”) in connection with this transaction and that no Broker



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brought about this transaction, other than Hughes Marino, Cushman & Wakefield and CBRE. Landlord and Tenant each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than Hughes Marino, Cushman & Wakefield and CBRE, claiming a commission or other form of compensation by virtue of having dealt with Tenant or Landlord, as applicable, with regard to this leasing transaction.

36. Limitation on Landlord's Liability. NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT TO THE CONTRARY: (A) LANDLORD SHALL NOT BE LIABLE TO TENANT OR ANY OTHER PERSON FOR (AND TENANT AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: TENANT'S PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, SCIENTIFIC RESEARCH, SCIENTIFIC EXPERIMENTS, LABORATORY ANIMALS, PRODUCT, SPECIMENS, SAMPLES, AND/OR SCIENTIFIC, BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LANDLORD FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE PREMISES OR ARISING IN ANY WAY UNDER THIS LEASE OR ANY OTHER AGREEMENT BETWEEN LANDLORD AND TENANT WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LANDLORD HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LANDLORD'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LANDLORD'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LANDLORD IN CONNECTION WITH THIS LEASE NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS. UNDER NO CIRCUMSTANCES SHALL LANDLORD OR ANY OF LANDLORD'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS OR CONTRACTORS BE LIABLE FOR INJURY TO TENANT'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.

Tenant acknowledges and agrees that measures and/or services implemented at the Project, if any, intended to encourage social distancing, promote and protect health and physical well-being and/or intended to limit the spread of Infectious Conditions, may not prevent the spread of such Infectious Conditions. Neither Landlord nor any Landlord Indemnified Parties shall have any liability and Tenant waives any claims against Landlord and the Landlord Indemnified Parties with respect to any loss, damage or injury in connection with (x) the implementation, or failure of Landlord or any Landlord Indemnified Parties to implement, any measures and/or services at the Project intended to encourage social distancing, promote and protect health and physical well-being and/or intended to limit the spread of Infectious Conditions, or (y) the failure of any measures and/or services implemented at the Project, if any, to limit the spread of any Infectious Conditions.

37. Severability. If any clause or provision of this Lease is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Lease shall not be affected thereby. It is also the intention of the parties to this Lease that in lieu of each clause or provision of this Lease that is illegal, invalid or unenforceable, there be added, as a part of this Lease, a clause or provision as similar in effect to such illegal, invalid or unenforceable clause or provision as shall be legal, valid and enforceable.

38. Signs; Exterior Appearance. Tenant shall not, without the prior written consent of Landlord, which may be granted or withheld in Landlord's sole discretion: (i) attach any awnings, exterior lights, decorations, balloons, flags, pennants, banners, painting or other projection to any outside wall of the Project, (ii) use any curtains, blinds, shades or screens other than Landlord's standard window coverings, (iii) coat or otherwise sunscreen the interior or exterior of any windows, (iv) place any bottles, parcels, or other articles on the window sills, (v) place any equipment, furniture or other items of personal property on any exterior balcony, or (vi) paint, affix or exhibit on any part of the Premises or the Project any signs, notices, window or door lettering, placards, decorations, or advertising media of any type which can



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be viewed from the exterior of the Premises. Suite entry/identification signage and Tenant identification signage on the Building lobby directory shall be inscribed, painted or affixed for Tenant by Landlord at Landlord's cost, and shall be of a size, color and type acceptable to Landlord. Nothing may be placed on the exterior of corridor walls or corridor doors other than Landlord's standard lettering. The directory tablet shall be provided exclusively for the display of the name and location of tenants.

Tenant shall have the non-exclusive right to display, at Tenant's sole and cost and expense, (x) "eyebrow" signage bearing Tenant's name and logo on the Building in the location and pursuant to the specifications designated on **Exhibit I ("Tenant's Eyebrow Signage")**, and (y) signage bearing Tenant's name and logo on the monument sign serving the Project in the location and pursuant to the specifications designated on **Exhibit I ("Monument Sign")**. Tenant acknowledges and agrees that Tenant's Eyebrow Signage and Tenant's signage on the Monument Sign including, without limitation, the size, color and type, shall be subject to Landlord's prior written approval, which shall not be unreasonably withheld, conditioned or delayed, and shall be subject to and in compliance with applicable Legal Requirements and Landlord's Project standards. Tenant shall be responsible, at Tenant's sole cost and expense, for the maintenance of Tenant's Eyebrow Signage and Tenant's signage on the Monument Sign, the removal of Tenant's Eyebrow Signage and Tenant's signage on the Monument Sign at the expiration or earlier termination of the Term and for the repair of all damage resulting from such removal.

39. Right to Extend Term. Tenant shall have the right to extend the Term of this Lease upon the following terms and conditions:

(a) **Extension Right.** Tenant shall have the one-time right (the "**Extension Right**") to extend the term of this Lease for 5 years (the "**Extension Term**") on the same terms and conditions as this Lease (other than with respect to Base Rent and the Work Letter) by giving Landlord written notice of its election to exercise the Extension Right at least 12 months and not more than 15 months prior to the expiration of the Base Term of this Lease.

Upon the commencement of the Extension Term, Base Rent shall be payable at the Market Rate (as defined below). Base Rent shall thereafter be adjusted on each annual anniversary of the commencement of the Extension Term by a percentage as determined by Landlord and agreed to by Tenant at the time the Market Rate is determined. As used herein, "**Market Rate**" shall mean at Landlord's option either (i) the rate that Landlord and affiliates of Landlord have accepted at Class A laboratory/office projects in the Sorrento Mesa submarket during the 12 month period prior to Tenant's exercise of its Extension Right from non-equity (i.e., not being offered equity in the buildings) and nonaffiliated tenants of similar financial strength for space of comparable size and quality (including the Initial Premises Tenant Improvements, the Subsequent Premises Tenant Improvements, Alterations and other improvements) and floor height for a comparable term, with the determination of the Market Rate to take into account all relevant factors, including tenant inducements, views, available amenities (including, without limitation, the Project Amenities, if any, and the Regional Amenities (as defined in Section 40)), age of the Building, age of mechanical systems serving the Premises, parking costs, leasing commissions, allowances or concessions, if any, or (ii) the rate that comparable landlords of comparable buildings have accepted in current transactions from non-equity (i.e., not being offered equity in the buildings) and nonaffiliated tenants of similar financial strength for space of comparable size and quality (including the Tenant Improvements, Alterations and other improvements) and floor height in Class A laboratory/office buildings in the Sorrento Mesa submarket (including those owned by Landlord or affiliates of Landlord) for a comparable term, with the determination of the Market Rate to take into account all relevant factors, including tenant inducements, views, available amenities (including, without limitation, the Project Amenities, if any, and the Regional Amenities), age of the Building, age of mechanical systems serving the Premises, parking costs, leasing commissions, allowances or concessions, if any.

If, on or before the date which is 240 days prior to the expiration of the Base Term of this Lease, Tenant has not agreed with Landlord's determination of the Market Rate and the rent escalations during the Extension Term after negotiating in good faith, Tenant shall be deemed to have elected arbitration as described in Section 39(b). Tenant acknowledges and agrees that, if Tenant has elected to exercise the Extension Right by delivering notice to Landlord as required in this Section 39(a), Tenant shall have no right thereafter to rescind or elect not to extend the term of this Lease for the Extension Term.



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(b) Arbitration.

(i) Within 10 days of Tenant's notice to Landlord of its election (or deemed election) to arbitrate Market Rate and escalations, each party shall deliver to the other a proposal containing the Market Rate and escalations that the submitting party believes to be correct ("**Extension Proposal**"). If either party fails to timely submit an Extension Proposal, the other party's submitted proposal shall determine the Base Rent and escalations for the Extension Term. If both parties submit Extension Proposals, then Landlord and Tenant shall meet within 7 days after delivery of the last Extension Proposal and make a good faith attempt to mutually appoint a single Arbitrator (and defined below) to determine the Market Rate and escalations. If Landlord and Tenant are unable to agree upon a single Arbitrator, then each shall, by written notice delivered to the other within 10 days after the meeting, select an Arbitrator. If either party fails to timely give notice of its selection for an Arbitrator, the other party's submitted proposal shall determine the Base Rent for the Extension Term. The 2 Arbitrators so appointed shall, within 5 business days after their appointment, appoint a third Arbitrator. If the 2 Arbitrators so selected cannot agree on the selection of the third Arbitrator within the time above specified, then either party, on behalf of both parties, may request such appointment of such third Arbitrator by application to any state court of general jurisdiction in the jurisdiction in which the Premises are located, upon 10 days prior written notice to the other party of such intent.

(ii) The decision of the Arbitrator(s) shall be made within 30 days after the appointment of a single Arbitrator or the third Arbitrator, as applicable. The decision of the single Arbitrator shall be final and binding upon the parties. The average of the two closest Arbitrators in a three Arbitrator panel shall be final and binding upon the parties. Each party shall pay the fees and expenses of the Arbitrator appointed by or on behalf of such party and the fees and expenses of the third Arbitrator shall be borne equally by both parties. If the Market Rate and escalations are not determined by the first day of the Extension Term, then Tenant shall pay Landlord Base Rent in an amount equal to the Base Rent in effect immediately prior to the Extension Term and increased by the Rent Adjustment Percentage until such determination is made. After the determination of the Market Rate and escalations, the parties shall make any necessary adjustments to such payments made by Tenant. Landlord and Tenant shall then execute an amendment recognizing the Market Rate and escalations for the Extension Term.

(iii) An "**Arbitrator**" shall be any person appointed by or on behalf of either party or appointed pursuant to the provisions hereof and:

(i) shall be (A) a member of the American Institute of Real Estate Appraisers with not less than 10 years of experience in the appraisal of improved office and high tech industrial real estate in the greater San Diego metropolitan area, or (B) a licensed commercial real estate broker with not less than 15 years' experience representing landlords and/or tenants in the leasing of high tech or life sciences space in the greater San Diego metropolitan area, (ii) devoting substantially all of their time to professional appraisal or brokerage work, as applicable, at the time of appointment and (iii) be in all respects impartial and disinterested.

(c) **Rights Personal.** The Extension Right is personal to Tenant and is not assignable without Landlord's consent, which may be granted or withheld in Landlord's sole discretion separate and apart from any consent by Landlord to an assignment of Tenant's interest in this Lease, except that it may be assigned in connection with any Permitted Assignment of this Lease.

(d) **Exceptions.** Notwithstanding anything set forth above to the contrary, the Extension Right shall, at Landlord's option, not be in effect and Tenant may not exercise its Extension Right:

(i) during any period of time that Tenant is in Default under any provision of this Lease; or



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(ii) Tenant is not in occupancy of 100% of the Premises; or

(iii) if Tenant has been in Default under any provision of this Lease 3 or more times, whether or not the Defaults are cured, during the 12 month period immediately prior to the date that Tenant intends to exercise the Extension Right, whether or not the Defaults are cured.

(e) **No Extensions.** The period of time within which the Extension Right may be exercised shall not be extended or enlarged by reason of Tenant's inability to exercise the Extension Right.

(f) **Termination.** The Extension Right shall, at Landlord's option, terminate and be of no further force or effect even after Tenant's due and timely exercise of the Extension Right, if, after such exercise, but prior to the commencement date of the Extension Term, (i) Tenant fails to timely cure any default by Tenant under this Lease (beyond any applicable notice and cure periods); or (ii) Tenant has Defaulted 3 or more times during the period from the date of the exercise of the Extension Right to the date of the commencement of the Extension Term, whether or not such Defaults are cured.

40. The Alexandria Amenities.

(a) **Generally.** Located at the project commonly known as 10996 Torreyana Road, San Diego, California ("**The Alexandria**"), which is owned by an affiliate of Landlord ("**The Alexandria Landlord**"), are certain amenities which include, without limitation, shared conference facilities (the "**The Alexandria Shared Conference Facilities**"), a fitness center and restaurant (collectively, the "**The Alexandria Amenities**"). Located at the project commonly known as Alexandria Tech Center (collectively, the "**Tech Center Project**"), which is owned by another affiliate or affiliates of Landlord (collectively, the "**Tech Center Landlord**"), are certain amenities which, as of the date of this Lease, consist of a fitness center and are anticipated in the future include additional amenities including, without limitation, shared conference facilities (the "**Tech Center Shared Conference Facilities**") and restaurant (collectively, the "**Tech Center Amenities**"). The Alexandria Amenities, the existing fitness center at the Tech Center Project and any future amenities at the Tech Center Project may be collectively referred to herein as the "**Alexandria Regional Amenities**." Subject to the terms of this Section 40, The Alexandria Regional Amenities are available for non-exclusive use by (a) Tenant, (b) Landlord, (c) the tenants of The Alexandria Landlord and the Tech Center Landlord, (d) The Alexandria Landlord, (e) the Tech Center Landlord, (f) other affiliates of Landlord, The Alexandria Landlord, the Tech Center Landlord and Alexandria Real Estate Equities, Inc. ("**ARE**"), (g) the tenants of such other affiliates of Landlord, The Alexandria Landlord, the Tech Center Landlord and ARE, and (h) any other parties permitted by The Alexandria Landlord and Tech Center Landlord (collectively, "**Users**"). Landlord, The Alexandria Landlord, Tech Center Landlord, ARE, and all affiliates of Landlord, The Alexandria Landlord, Tech Center Landlord and ARE may be referred to collectively herein as the "**ARE Parties**." Notwithstanding anything to the contrary contained herein, Tenant acknowledges and agrees that (i) The Alexandria Landlord shall have the right, at the sole discretion of The Alexandria Landlord, to not make The Alexandria Amenities available for use by some or all currently contemplated Users (including Tenant), and Tech Center Landlord shall have the right, at the sole discretion of Tech Center Landlord, to not make the Tech Center Amenities available for use by some or all currently contemplated Users (including Tenant). The Alexandria Landlord and Tech Center Landlord shall have the sole right to determine all matters related to The Alexandria Amenities and the Tech Center Amenities, respectively, including, without limitation, relating to the reconfiguration, relocation, modification or removal of any of The Alexandria Amenities or the Tech Center Amenities, respectively, and/or to revise, expand or discontinue any of the services (if any) provided in connection with The Alexandria Amenities or the Tech Center Amenities, respectively. Tenant acknowledges and agrees that Landlord has not made any representations or warranties regarding the availability of the Alexandria Regional Amenities and that Tenant is not entering into this Lease relying on the continued availability of the Alexandria Regional Amenities to Tenant.

(b) **License.** So long as The Alexandria, the Tech Center Project and the Project, respectively, continue to be owned by affiliates of ARE, Tenant shall have the non-exclusive right to the use, in common with other Users pursuant to the terms of this Section 40, of the Alexandria Regional Amenities. Fitness



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center passes for use of the fitness centers at The Alexandria and the Tech Center Project shall be issued to Tenant for all full time employees of Tenant employed at the Premises. Commencing on the Commencement Date with respect to the Initial Premises and commencement on the Subsequent Premises Commencement Date with respect to the Subsequent Premises, Tenant shall commence paying Landlord a fixed fee during the Base Term initially equal to \$2.40 per rentable square foot of the Premises per year (“**Amenities Fee**”). The Amenities Fee shall be payable on the first day of each month during the Term whether or not Tenant elects to use any or all of the Alexandria Regional Amenities. The Amenities Fee shall be increased annually on each anniversary of the Commencement Date by 3%. Landlord may adjust the Amenities Fee to a market rate during the Extension Term, provided that the Amenities Fee shall in no event be less than the Amenities Fee payable during the last year of the Base Term. If substantially all (i.e., all available shared conference facilities and fitness centers) of the then-existing Alexandria Regional Amenities become materially unavailable for use by Tenant (for any reason other than a Default by Tenant under this Lease or the default by Tenant of any agreement(s) relating to the use of the Alexandria Regional Amenities by Tenant) for a period in excess of 60 consecutive days, then, commencing on the expiration of such 60-day period, the Amenities Fee then-currently payable by Tenant shall be abated during the period that substantially all of the then-existing Alexandria Regional Amenities continue to be materially unavailable for use by Tenant as provided above.

(c) **Shared Conference Facilities.** Use by Tenant of The Alexandria Shared Conference Facilities and the Tech Center Shared Conference Facilities and the restaurants at The Alexandria and the Tech Center Project shall be in common with other Users with scheduling procedures reasonably determined by The Alexandria Landlord or the Tech Center Landlord, as applicable, or The Alexandria Landlord’s or Tech Center Landlord’s then designated event operator (each, an “**Event Operator**”). Tenant’s use of The Alexandria Shared Conference Facilities and the Tech Center Shared Conference Facilities shall be subject to the payment by Tenant to The Alexandria Landlord or the Tech Center Landlord, as applicable, of a fee equal to The Alexandria Landlord’s or Tech Center Landlord’s, as applicable, quoted rates for the usage of The Alexandria Shared Conference Facilities or the Tech Center Shared Conference Facilities, as applicable, in effect at the time of Tenant’s scheduling. Tenant’s use of the conference rooms in The Alexandria Shared Conference Facilities and the Tech Center Shared Conference Facilities shall be subject to availability and The Alexandria Landlord and Tech Center Landlord, as applicable, (or, if applicable, the applicable Event Operator) reserves the right to exercise its reasonable discretion in the event of conflicting scheduling requests among Users. Tenant hereby acknowledges that (i) Biocom/San Diego, a California nonprofit corporation (“**Biocom**”) has the right to reserve The Alexandria Shared Conference Facilities and any reservable dining area(s) included within The Alexandria Amenities for up to 50% of the time that The Alexandria Shared Conference Facilities and reservable dining area(s) are available for use by Users each calendar month, and (ii) Illumina, Inc., a Delaware corporation, has the exclusive use of the main conference room within The Alexandria Shared Conference Facilities for up to 4 days per calendar month.

Tenant shall be required to use the food service operator designated by The Alexandria Landlord at The Alexandria and the food service operator designated by the Tech Center Landlord at Tech Center Project (as applicable, the “**Designated Food and Beverage Operator**”) for any food and/or beverage service or catered events held by Tenant in The Alexandria Shared Conference Facilities or the Tech Center Shared Conference Facilities, as applicable. The Alexandria Landlord and the Tech Center Landlord have the right, in their sole and absolute discretion, to change the Designated Food and Beverage Operator at any time. Tenant may not use any vendors other than the Designated Food and Beverage Operator nor may Tenant supply its own food and/or beverages in connection with any food and/or beverage service or catered events held by Tenant in The Alexandria Shared Conference Facilities or the Tech Center Shared Conference Facilities.

Tenant shall, at Tenant’s sole cost and expense, (i) be responsible for the set-up of The Alexandria Shared Conference Facilities or the Tech Center Shared Conference Facilities, as applicable, in connection with Tenant’s use (including, without limitation ensuring that Tenant has a sufficient number of chairs and tables and the appropriate equipment), and (ii) surrender The Alexandria Shared Conference Facilities and the Tech Center Shared Conference Facilities after each time that Tenant uses The Alexandria Shared Conference Facilities and the Tech Center Shared Conference Facilities free of Tenant’s personal property,



in substantially the same set up and same condition as received, and free of any debris and trash. If Tenant fails to restore and surrender The Alexandria Shared Conference Facilities and the Tech Center Shared Conference Facilities as required by sub-section (ii) of the immediately preceding sentence, such failure shall constitute a “**Shared Facilities Default.**” Each time that Landlord reasonably determines that Tenant has committed a Shared Facilities Default, Tenant shall be required to pay Landlord a penalty within 5 days after notice from Landlord of such Shared Facilities Default. The penalty payable by Tenant in connection with the first Shared Facilities Default shall be \$200. The penalty payable shall increase by \$50 for each subsequent Shared Facilities Default (for the avoidance of doubt, the penalty shall be \$250 for the second Shared Facilities Default, shall be \$300 for the third Shared Facilities Default, etc.). In addition to the foregoing, Tenant shall be responsible for reimbursing The Alexandria Landlord, the Tech Center Landlord or Landlord, as applicable, for all costs expended by The Alexandria Landlord, the Tech Center Landlord or Landlord, as applicable, in repairing any damage to The Alexandria Shared Conference Facilities, the Tech Center Shared Conference Facilities, the Alexandria Regional Amenities, The Alexandria, the Tech Center Amenities or the Tech Center Project caused by Tenant or any Tenant Related Party. The provisions of this Section 40(c) shall survive the expiration or earlier termination of this Lease.

(d) **Rules and Regulations.** Tenant shall be solely responsible for paying for any and all ancillary services (e.g., audio visual equipment) provided to Tenant, all food services operators and any other third party vendors providing services to Tenant at The Alexandria or the Tech Center Project. Tenant shall use the Alexandria Regional Amenities (including, without limitation, The Alexandria Shared Conference Facilities and the Tech Center Shared Conference Facilities) in compliance with all applicable Legal Requirements and any rules and regulations imposed by The Alexandria Landlord or Tech Center Landlord, respectively, or Landlord from time to time and in a manner that will not interfere with the rights of other Users. The use of the Alexandria Regional Amenities other than the Shared Conference Facilities by employees of Tenant shall be in accordance with the terms and conditions of the standard licenses, indemnification and waiver agreement required by The Alexandria Landlord, the Tech Center Landlord or any operator of the Alexandria Regional Amenities, as applicable, to be executed by all persons wishing to use such Alexandria Regional Amenities. Neither The Alexandria Landlord, the Tech Center Landlord nor Landlord (nor, if applicable, any other affiliate of Landlord) shall have any liability or obligation for the breach of any rules or regulations by other Users with respect to the Alexandria Regional Amenities. Tenant shall not make any alterations, additions, or improvements of any kind to any of the Alexandria Regional Amenities, The Alexandria or the Tech Center Project.

Tenant acknowledges and agrees that The Alexandria Landlord and the Tech Center Landlord, shall have the right at any time and from time to time to reconfigure, relocate, modify or remove any of the Alexandria Regional Amenities at The Alexandria or the Tech Center Project, respectively, and/or to revise, expand or discontinue any of the services (if any) provided in connection with the Alexandria Regional Amenities.

(e) **Waiver of Liability and Indemnification.** Tenant warrants that it will use reasonable care to prevent damage to property and injury to persons while on The Alexandria or the Tech Center Project. Tenant waives any claims it or any Tenant Parties may have against any ARE Parties relating to, arising out of or in connection with the use by Tenant and/or any Tenant Parties of the Alexandria Regional Amenities and any entry by Tenant and/or any Tenant Parties onto The Alexandria or the Tech Center Project, and Tenant releases and exculpates all ARE Parties from any liability relating to, arising out of or in connection with the Alexandria Regional Amenities and any entry by Tenant and/or any Tenant Parties onto The Alexandria and/or the Tech Center Project, except, in each case, to the extent caused by the willful misconduct or gross negligence of any ARE Party. Tenant hereby agrees to indemnify, defend, and hold harmless the ARE Parties from any claim of damage to property or injury to person relating to, arising out of or in connection with (i) the use of the Alexandria Regional Amenities by Tenant or any Tenant Parties, and (ii) any entry by Tenant and/or any Tenant Parties onto The Alexandria and/or the Tech Center Project, except to the extent caused by the willful misconduct or negligence of any ARE Party. The provisions of this Section 40 shall survive the expiration or earlier termination of this Lease.



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(f) **Insurance.** As of the Commencement Date, Tenant shall cause The Alexandria Landlord and the Tech Center Landlord to be named as additional insureds under the commercial general liability policy of insurance that Tenant is required to maintain pursuant to Section 17 of this Lease.

41. Miscellaneous.

(a) **Notices.** All notices or other communications between the parties shall be in writing and shall be deemed duly given upon delivery or refusal to accept delivery by the addressee thereof if delivered in person, or upon actual receipt if delivered by reputable overnight guaranty courier, addressed and sent to the parties at their addresses set forth above. Landlord and Tenant may from time to time by written notice to the other designate another address for receipt of future notices.

(b) **Joint and Several Liability.** If and when included within the term “**Tenant**,” as used in this instrument, there is more than one person or entity, each shall be jointly and severally liable for the obligations of Tenant.

(c) **Financial Information.** Tenant shall furnish to Landlord with true and complete copies of (i) upon Landlord’s written request on an annual basis, Tenant’s most recent audited annual financial statements, provided, however, that Tenant shall not be required to deliver to Landlord such annual financial statements until available from Tenant’s auditing firm, (ii) upon Landlord’s written request on a quarterly basis, Tenant’s most recent unaudited quarterly financial statements; provided, however, that Tenant shall not be required to deliver to Landlord such quarterly financial statements for any particular quarter sooner than the date that is 90 days after the end of each of Tenant’s fiscal quarters during the Term, (iii) upon Landlord’s written request from time to time, corporate brochures and/or profiles prepared by Tenant for prospective investors, and (iv) upon Landlord’s written request from time to time, any other financial information or summaries that Tenant typically provides to its lenders or shareholders. Notwithstanding anything to the contrary contained in this Lease, Landlord’s written request for financial information pursuant to this Section 41(c) may delivered to Tenant via email. Notwithstanding the foregoing, Tenant shall not be required to provide such financial statements to Landlord if Tenant is subject to a quiet period prior to a public offering, as required by applicable U.S. securities laws or regulations. So long as Tenant is a “public company” and its financial information is publicly available, then the foregoing delivery requirements of this Section 41(c) shall not apply.

Landlord agrees to hold the financial statements and other financial information provided under this section in confidence using at least the same degree of care that Landlord uses to protect its own confidential information of a similar nature; provided, however, that Landlord may disclose such information to Landlord’s auditors, attorneys, consultants, lenders, affiliates, prospective purchasers and investors and other third parties as reasonably required in the ordinary course of Landlord’s operations, provided that Landlord shall deliver written notice to such parties requiring them to treat the information as confidential. The obligations of confidentiality hereunder shall not apply to information that was in the public domain at the time it was disclosed to Landlord, entered into the public domain subsequent to the time it was disclosed to Landlord through no fault of Landlord, or was disclosed by Tenant to a third party without any confidentiality restrictions. In addition, Landlord may disclose such information without violating this section to the extent that disclosure is reasonably necessary (x) for Landlord to enforce its rights or defend itself under this Lease; (y) for required submissions to any state or federal regulatory body; or (z) for compliance with a valid order of a court or other governmental body having jurisdiction, or any law, statute, or regulation, provided that, other than in an emergency, before disclosing such information, Landlord shall give Tenant prior notice of the same promptly upon becoming aware of the need for disclosure but in no event less than 10 business days prior to such disclosure, in order to allow Tenant to obtain a protective order or such other judicial relief.

(d) **Recordation.** Neither this Lease nor a memorandum of lease shall be filed by or on behalf of Tenant in any public record. Landlord may prepare and file, and upon request by Landlord Tenant will execute, a memorandum of lease.



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(e) **Interpretation.** The normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Lease or any exhibits or amendments hereto. Words of any gender used in this Lease shall be held and construed to include any other gender, and words in the singular number shall be held to include the plural, unless the context otherwise requires. The captions inserted in this Lease are for convenience only and in no way define, limit or otherwise describe the scope or intent of this Lease, or any provision hereof, or in any way affect the interpretation of this Lease.

(f) **Not Binding Until Executed.** The submission by Landlord to Tenant of this Lease shall have no binding force or effect, shall not constitute an option for the leasing of the Premises, nor confer any right or impose any obligations upon either party until execution of this Lease by both parties.

(g) **Limitations on Interest.** It is expressly the intent of Landlord and Tenant at all times to comply with applicable law governing the maximum rate or amount of any interest payable on or in connection with this Lease. If applicable law is ever judicially interpreted so as to render usurious any interest called for under this Lease, or contracted for, charged, taken, reserved, or received with respect to this Lease, then it is Landlord's and Tenant's express intent that all excess amounts theretofore collected by Landlord be credited on the applicable obligation (or, if the obligation has been or would thereby be paid in full, refunded to Tenant), and the provisions of this Lease immediately shall be deemed reformed and the amounts thereafter collectible hereunder reduced, without the necessity of the execution of any new document, so as to comply with the applicable law, but so as to permit the recovery of the fullest amount otherwise called for hereunder.

(h) **Choice of Law.** Construction and interpretation of this Lease shall be governed by the internal laws of the state in which the Premises are located, excluding any principles of conflicts of laws.

(i) **Time.** Time is of the essence as to the performance of Tenant's obligations under this Lease.

(j) **OFAC.** Tenant and all beneficial owners of Tenant are currently (a) in compliance with and shall at all times during the Term of this Lease remain in compliance with the regulations of the Office of Foreign Assets Control ("OFAC") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "OFAC Rules"), (b) not listed on, and shall not during the term of this Lease be listed on, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List, or the Sectoral Sanctions Identification List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

(k) **Incorporation by Reference.** All exhibits and addenda attached hereto are hereby incorporated into this Lease and made a part hereof. If there is any conflict between such exhibits or addenda and the terms of this Lease, such exhibits or addenda shall control.

(l) **Entire Agreement.** This Lease, including the exhibits attached hereto, constitutes the entire agreement between Landlord and Tenant pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, understandings, letters of intent, negotiations and discussions, whether oral or written, of the parties, and there are no warranties, representations or other agreements, express or implied, made to either party by the other party in connection with the subject matter hereof except as specifically set forth herein.

(m) **No Accord and Satisfaction.** No payment by Tenant or receipt by Landlord of a lesser amount than the monthly installment of Base Rent or any Additional Rent will be other than on account of the earliest stipulated Base Rent and Additional Rent, nor will any endorsement or statement on any check or letter accompanying a check for payment of any Base Rent or Additional Rent be an accord and satisfaction. Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such Rent or to pursue any other remedy provided in this Lease.



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(n) **Hazardous Activities.** Notwithstanding any other provision of this Lease, Landlord, for itself and its employees, agents and contractors, reserves the right to refuse to perform any repairs or services in any portion of the Premises which, pursuant to Tenant's routine safety guidelines, practices or custom or prudent industry practices, require any form of protective clothing or equipment other than safety glasses. In any such case, Tenant shall contract with parties who are acceptable to Landlord, in Landlord's reasonable discretion, for all such repairs and services, and Landlord shall, to the extent required, equitably adjust Tenant's Share of Operating Expenses in respect of such repairs or services to reflect that Landlord is not providing such repairs or services to Tenant.

(o) **Redevelopment of Project.** Tenant acknowledges that Landlord, in its sole discretion, may from time to time expand, renovate and/or reconfigure the Project as the same may exist from time to time and, in connection therewith or in addition thereto, as the case may be, from time to time without limitation: (a) change the shape, size, location, number and/or extent of any improvements, buildings, structures, lobbies, hallways, entrances, exits, parking and/or parking areas relative to any portion of the Project; (b) modify, eliminate and/or add any buildings, improvements, and parking structure(s) either above or below grade, to the Project, the Common Areas and/or any other portion of the Project and/or make any other changes thereto affecting the same; and (c) make any other changes, additions and/or deletions in any way affecting the Project and/or any portion thereof as Landlord may elect from time to time, including without limitation, additions to and/or deletions from the land comprising the Project, the Common Areas and/or any other portion of the Project. Tenant acknowledges and agrees that construction noise, vibrations and dust associated with normal construction activities in connection with any redevelopment of the Project are to be expected during the course of such construction. Notwithstanding anything to the contrary contained in this Lease, Tenant shall have no right to seek damages (including abatement of Rent) or to cancel or terminate this Lease because of any proposed changes, expansion, renovation or reconfiguration of the Project nor shall Tenant have the right to restrict, inhibit or prohibit any such changes, expansion, renovation or reconfiguration; provided, however, Landlord shall not change the size, dimensions, location or Tenant's Permitted Use of the Premises.

(p) **Discontinued Use.** If, at any time following the Commencement Date, Tenant does not continuously operate its business in the Premises for a period of 180 consecutive days, Landlord may, but is not obligated to, elect to terminate this Lease upon 30 days' written notice to Tenant, whereupon this Lease shall terminate 30 days' after Landlord's delivery of such written notice ("**Termination Date**"), and Tenant shall vacate the Premises and deliver possession thereof to Landlord in the condition required by the terms of this Lease on or before the Termination Date and Tenant shall have no further obligations under this Lease except for those accruing prior to the Termination Date and those which, pursuant to the terms of this Lease, survive the expiration or early termination of this Lease.

(q) **EV Charging Stations.** Landlord shall not unreasonably withhold its consent to Tenant's written request to install 1 or more electric vehicle car charging stations ("**EV Stations**") in the parking area serving the Project; provided, however, that Tenant complies with all reasonable requirements, standards, rules and regulations which may be imposed by Landlord, at the time Landlord's consent is granted, in connection with Tenant's installation, maintenance, repair and operation of such EV Stations, which may include, without limitation, the charge to Tenant of a reasonable monthly rental amount for the parking spaces used by Tenant for such EV Stations, Landlord's designation of the location of Tenant's EV Stations, and Tenant's payment of all costs whether incurred by Landlord or Tenant in connection with the installation, maintenance, repair and operation of each Tenant's EV Station(s). Nothing contained in this paragraph is intended to increase the number of parking spaces which Tenant is otherwise entitled to use at the Project under Section 10 of this Lease nor impose any additional obligations on Landlord with respect to Tenant's parking rights at the Project.

(r) **California Accessibility Disclosure.** For purposes of Section 1938(a) of the California Civil Code, Landlord hereby discloses to Tenant, and Tenant hereby acknowledges, that the Project has



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not undergone inspection by a Certified Access Specialist (CASp). In addition, the following notice is hereby provided pursuant to Section 1938(e) of the California Civil Code: “A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises.” In furtherance of and in connection with such notice: (i) Tenant, having read such notice and understanding Tenant’s right to request and obtain a CASp inspection, hereby elects not to obtain such CASp inspection and waives its rights to obtain a CASp inspection with respect to the Premises, Building and/or Project to the extent permitted by Legal Requirements; and (ii) if the waiver set forth in clause (i) hereinabove is not enforceable pursuant to Legal Requirements, then Landlord and Tenant hereby agree as follows (which constitutes the mutual agreement of the parties as to the matters described in the last sentence of the foregoing notice): (A) Tenant shall have the one-time right to request for and obtain a CASp inspection, which request must be made, if at all, in a written notice delivered by Tenant to Landlord; (B) any CASp inspection timely requested by Tenant shall be conducted (1) at a time mutually agreed to by Landlord and Tenant, (2) in a professional manner by a CASp designated by Landlord and without any testing that would damage the Premises, Building or Project in any way, and (3) at Tenant’s sole cost and expense, including, without limitation, Tenant’s payment of the fee for such CASp inspection, the fee for any reports prepared by the CASp in connection with such CASp inspection (collectively, the “**CASp Reports**”) and all other costs and expenses in connection therewith; (C) the CASp Reports shall be delivered by the CASp simultaneously to Landlord and Tenant; (D) Tenant, at its sole cost and expense, shall be responsible for making any improvements, alterations, modifications and/or repairs to or within the Premises to correct violations of construction-related accessibility standards including, without limitation, any violations disclosed by such CASp inspection; and (E) if such CASp inspection identifies any improvements, alterations, modifications and/or repairs necessary to correct violations of construction-related accessibility standards relating to those items of the Building and Project located outside the Premises that are Landlord’s obligation to repair as set forth in this Lease, then Landlord shall perform such improvements, alterations, modifications and/or repairs as and to the extent required by Legal Requirements to correct such violations, and Tenant shall reimburse Landlord for the cost of such improvements, alterations, modifications and/or repairs within 10 business days after Tenant’s receipt of an invoice therefor from Landlord.

(s) **Shuttle Services.** Landlord and affiliates of Landlord plan to provide a campus shuttle service for the Project and other buildings in the vicinity of the Project that are owned by affiliates of Landlord (the “**Shuttle Service**”); provided, however, that neither Landlord nor any affiliate of Landlord shall be obligated to provide the Shuttle Service (or, once the Shuttle Service has commenced, to continue providing the Shuttle Service for any specific period of time) or to cause the Shuttle Service to follow any specific route, make any specific stops, or adhere to any specific schedule or hours of operation. If Landlord and affiliates of Landlord actually commence operation of the Shuttle Service, (i) Landlord shall give Tenant written notice of the date such operation will commence (“**Shuttle Services Commencement Date**”) and the planned route, stops, schedule, and hours of operation, (ii) Landlord shall permit Tenant’s employees actually employed at the Project to use the Shuttle Service, and (iii) regardless of whether Tenant’s employees use the Shuttle Services, commencing on later to occur of (x) the Shuttle Services Commencement Date, or the Commencement Date, through the earlier of the expiration of the Term or the date that Landlord permanently ceases to provide Shuttle Service, Operating Expenses shall include the cost of provision the Shuttle Service (the “**Shuttle Service Costs**”). Tenant acknowledges and agrees that Landlord has not made any representations or warranties regarding the commencement or continued availability of the Shuttle Service and that Tenant is not entering into this Lease with an expectation that the Shuttle Service shall commence or continue to be available to Tenant throughout the Term.

(t) **Counterparts.** This Lease may be executed in 2 or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature process complying



with the U.S. federal E-SIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this Lease and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.



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IN WITNESS WHEREOF, Landlord and Tenant have executed this Lease as of the day and year first above written.

TENANT:

ARTIVA BIOTHERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Fred Aslan

Its: CEO

☒ I hereby certify that the signature, name, and title above are my signature, name and title.

LANDLORD:

ARE-SD REGION NO. 66, LLC,
a Delaware limited liability company

By: ARE-SD REGION NO. 66 MM, LLC, a Delaware limited liability company, managing member

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership, managing member

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

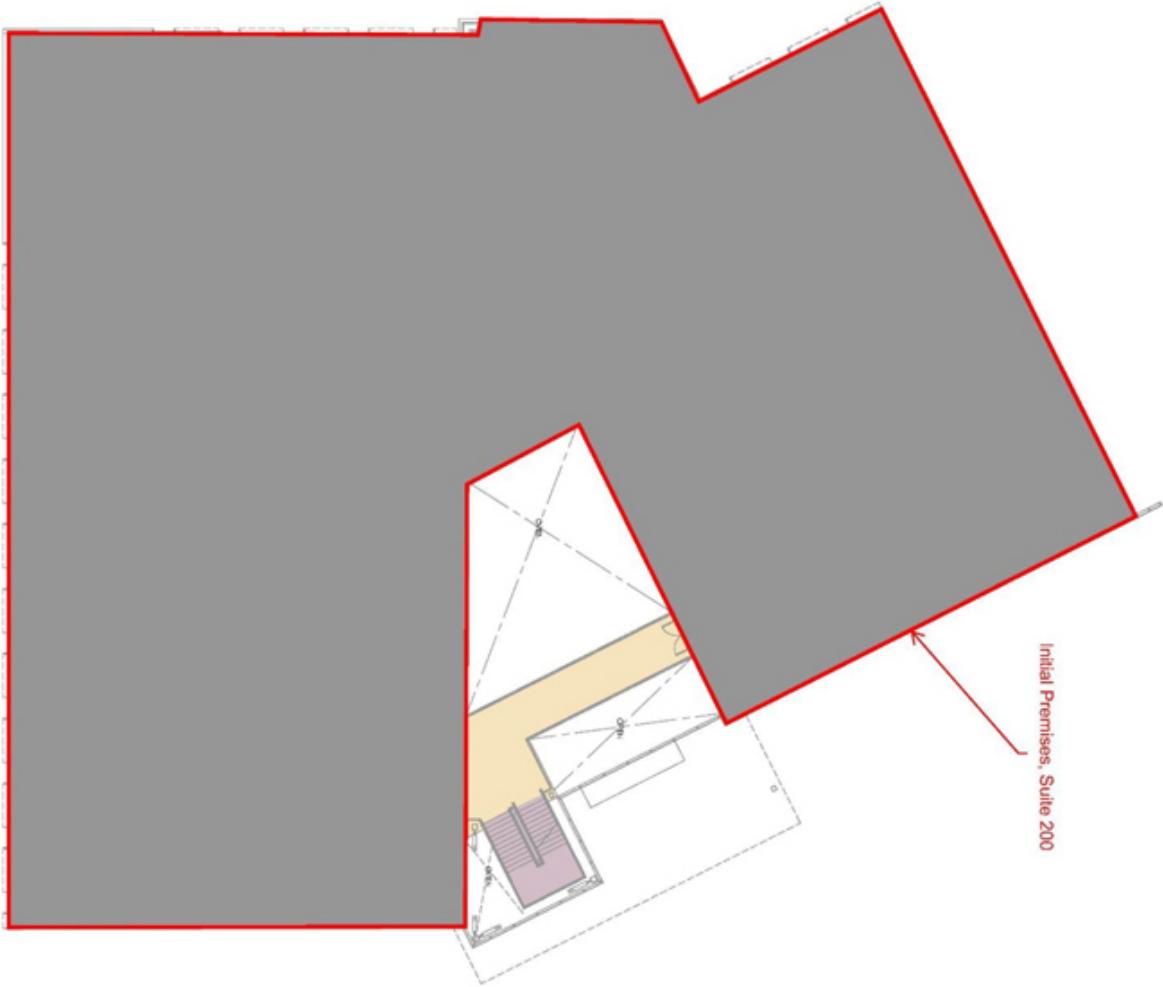
By: /s/ Gary Dean

Its: Executive Vice President – Real Estate
Legal Affairs



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5505 MOREHOUSE DRIVE - SECOND LEVEL CONCEPT PLAN

SCALE: 1" = 20'-0"

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4/22/2021



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SCALE: 1" = 20'-0"

30/04/2020 11:11 In: Short Statured Action Hero; 10/04/2020 11:21 Short Statured Action Hero; 1/05/2020 11:21

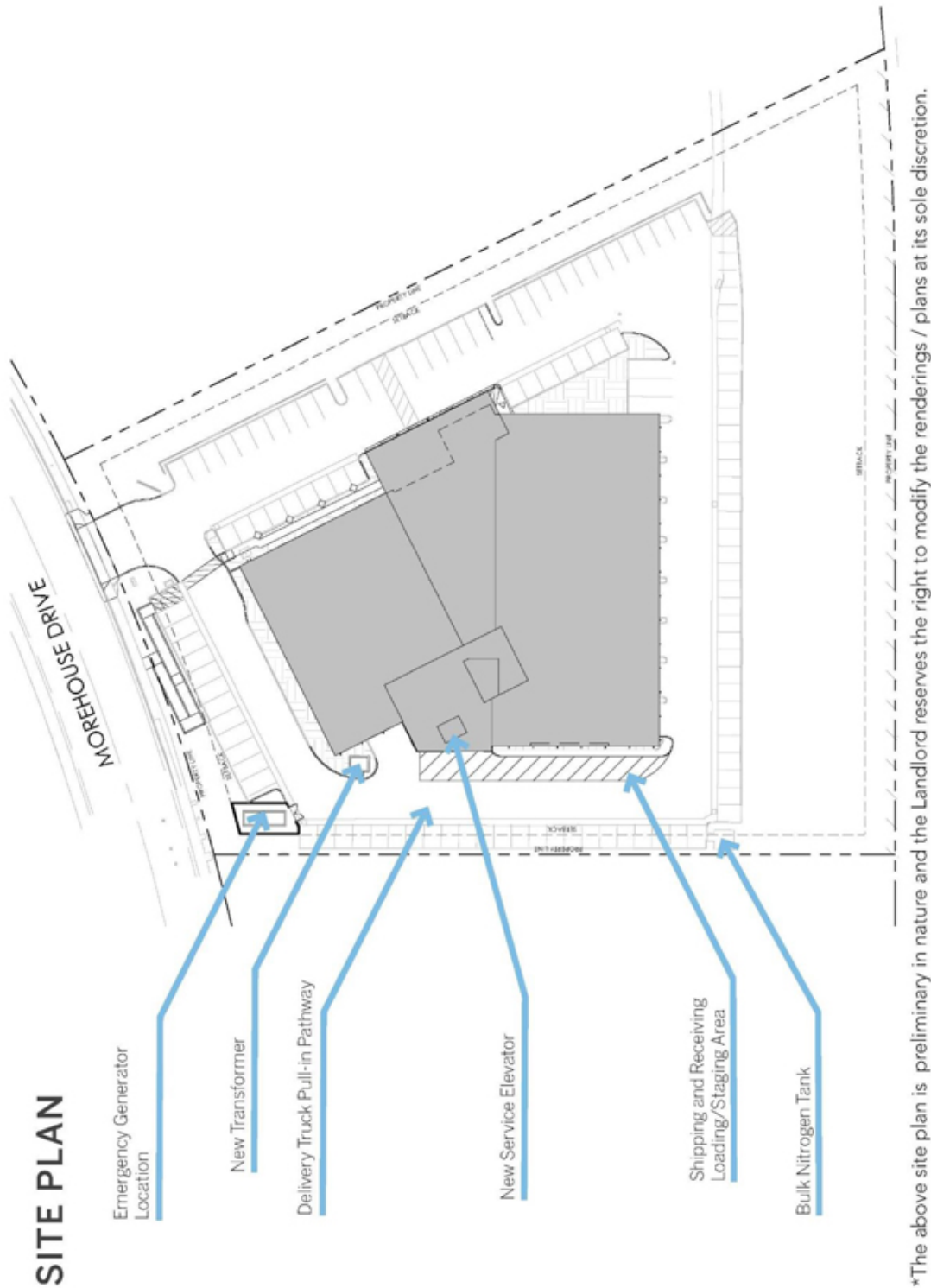
4/27/2021



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EXHIBIT B TO LEASE

DESCRIPTION OF PROJECT



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EXHIBIT C-1 TO LEASE

INITIAL PREMISES WORK LETTER

THIS INITIAL PREMISES WORK LETTER dated June 16, 2021 (this “**Initial Premises Work Letter**”) is made and entered into by and between **ARE-SD REGION NO. 66, LLC**, a Delaware limited liability company (“**Landlord**”), and **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation, and is attached to and made a part of the Lease Agreement dated June 16, 2021 (the “**Lease**”), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

1. **General Requirements.**

(a) **Tenant’s Authorized Representative.** Tenant designates Peter Flynn and Michael Faerm (either such individual acting alone, “**Tenant’s Representative**”) as the only persons authorized to act for Tenant pursuant to this Initial Premises Work Letter. Landlord shall not be obligated to respond to or act upon any request, approval, inquiry or other communication (“**Communication**”) from or on behalf of Tenant in connection with this Initial Premises Work Letter unless such Communication is in writing from Tenant’s Representative. Tenant may change either Tenant’s Representative at any time upon not less than 5 business days advance written notice to Landlord. Neither Tenant nor Tenant’s Representative shall be authorized to direct Landlord’s contractors in the performance of Landlord’s Work (as hereinafter defined).

(b) **Landlord’s Authorized Representative.** Landlord designates Alex Wehrmann and Michael Barbera either such individual acting alone, “**Landlord’s Representative**”) as the only persons authorized to act for Landlord pursuant to this Initial Premises Work Letter. Tenant shall not be obligated to respond to or act upon any request, approval, inquiry or other Communication from or on behalf of Landlord in connection with this Initial Premises Work Letter unless such Communication is in writing from Landlord’s Representative. Landlord may change either Landlord’s Representative at any time upon not less than 5 business days advance written notice to Tenant. Landlord’s Representative shall be the sole persons authorized to direct Landlord’s contractors in the performance of Landlord’s Work.

(c) **Architects, Consultants and Contractors.** Landlord and Tenant hereby acknowledge and agree that, provided that their fees are at current market rates for comparable life science projects: (i) DPR shall be the general contractor for the Initial Premises Tenant Improvements (the “**General Contractor**”), (ii) McFarlane Architects shall be the architect (the “**TI Architect**”) for the Initial Premises Tenant Improvements, and (iii) any subcontractors for the Initial Premises Tenant Improvements shall be selected by Landlord pursuant to a competitive process, and such subcontractors shall be subject to Tenant’s approval, which approval shall not be unreasonably withheld, conditioned or delayed.

2. **Initial Premises Tenant Improvements.**

(a) **Initial Premises Tenant Improvements Defined.** As used herein, “**Initial Premises Tenant Improvements**” shall mean all improvements to the Initial Premises of a fixed and permanent nature as shown on the TI Construction Drawings, as defined in Section 2(c) below.

(b) **Tenant’s Space Plans.** The plan prepared by the TI Architect attached hereto as **Schedule 1** (the “**Space Plans**”) and the tenant improvement specifications for the Initial Premises Tenant Improvements attached hereto as **Schedule 2** (the “**TI Specifications**”) have been approved by both Landlord and Tenant. Landlord and Tenant further acknowledge and agree that any changes to the Space Plans or the TI Specifications requested by Tenant constitute a Change Request the cost of which changes shall be paid for out of the TI Fund (as defined in Section 5(d)). Tenant shall be solely responsible for all costs incurred by Landlord to alter the Building as a result of Tenant’s requested Changes (which shall be subject to the terms of Section 4 hereof).



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(c) **Working Drawings.** Landlord shall cause the TI Architect to prepare and deliver to Tenant for review and comment construction plans, specifications and drawings for the Initial Premises Tenant Improvements (“**TI Construction Drawings**”), which TI Construction Drawings shall be prepared substantially in accordance with the Space Plans and the TI Specifications. Tenant shall be solely responsible for ensuring that the TI Construction Drawings reflect Tenant’s requirements for the Initial Premises Tenant Improvements. Tenant shall deliver its written comments on the TI Construction Drawings to Landlord not later than 10 days after Tenant’s receipt of the same; provided, however, that Tenant may not disapprove any matter that is consistent with the Space Plans and TI Specifications without submitting a Change Request. Landlord and the TI Architect shall consider all such comments in good faith and shall, within 10 days after receipt, notify Tenant how Landlord proposes to respond to such comments, but Tenant’s review rights pursuant to the foregoing sentence shall not delay the design or construction schedule for the Initial Premises Tenant Improvements. Any disputes in connection with such comments shall be resolved in accordance with Section 2(d) hereof. Provided that the design reflected in the TI Construction Drawings is consistent with the Space Plans and TI Specifications, Tenant shall approve the TI Construction Drawings submitted by Landlord, unless Tenant submits a Change Request. Once approved by Tenant, subject to the provisions of Section 4 below, Landlord shall not materially modify the TI Construction Drawings except as may be reasonably required in connection with the issuance of the TI Permit (as defined in Section 3(b) below).

(d) **Approval and Completion.** Both a schedule of critical dates (“**Initial Premises Critical Dates Schedule**”) and a more detailed schedule for Landlord’s Work are attached hereto as **Schedule 3**. It is hereby acknowledged by Landlord and Tenant that the schematic design of the Initial Premises Tenant Improvements, the design development for the Initial Premises Tenant Improvements and the completion of the permit set of plans for Landlord’s Work must be completed by the dates set forth in Initial Premises Critical Dates Schedule, in order for the Initial Premises Tenant Improvements to be Substantially Complete by the Target Commencement Date (as defined in the Lease). Upon any dispute regarding the design of the Initial Premises Tenant Improvements, which is not settled within 10 business days after notice of such dispute is delivered by one party to the other, Tenant may make the final decision regarding the design of the Initial Premises Tenant Improvements, provided (i) Tenant acts reasonably and such final decision is either consistent with or a compromise between Landlord’s and Tenant’s positions with respect to such dispute, (ii) all costs and expenses resulting from any such decision by Tenant shall be payable out of the TI Fund, and (iii) Tenant’s decision will not affect the base Building, structural components of the Building or any Building Systems (in which case Landlord shall make the final decision). Any changes to the TI Construction Drawings following Landlord’s and Tenant’s approval of same requested by Tenant shall be processed as provided in Section 4 hereof.

3. Performance of Landlord’s Work.

(a) **Definition of Landlord’s Work.** As used herein, “**Landlord’s Work**” shall mean (i) the work of constructing the Initial Premises Tenant Improvements, (ii) the work of constructing the base, core and shell of the Building (the “**Core & Shell**”) in a “warm shell” condition as reflected on the Base, Core & Shell Specifications attached hereto as **Schedule 4** (the “**Core & Shell Specifications**”), (iii) the development of the Common Areas of the Project in accordance with the Core & Shell Basis of Design including a new Building automation system, new boilers with sufficient capacity for Tenant’s cGMP requirements, refurbished chiller, shared emergency generator and enclosure, new rooftop equipment, vertical HVAC and plumbing distribution, shared “house” systems including vacuum and compressed air, a nitrogen system, a DI water system, common lobby and common restrooms, new glass atrium at entry, new exterior Building skin, new finishes in existing stairs and Building core area, electric rooms, fire protection systems and other core functions (iv) related site work reflected on the Core & Shell Specifications, and (v) the work of constructing the items identified on the “**Project Responsibility Matrix**” attached hereto as **Schedule 5** as “**Provided by Landlord at Landlord Cost.**” The design of the Core & Shell shall be generally consistent with the Core & Shell Basis of Design; provided, however, that Tenant acknowledges that Landlord may make changes to the Core & Shell, as determined by Landlord in its sole and absolute discretion, provided such changes do not materially adversely affect the base Building mechanical, electrical or plumbing systems serving the Premises. Tenant shall have no right to request any changes to the Core & Shell.



The reference in the Responsibility Matrix to (x) “Provided by Landlord as Part of Core & Shell” refers to work that will be paid for by Landlord, (y) “Provided by Landlord as part of the Tenant Improvement Fund” refers to the Initial Premises Tenant Improvements that will be paid out of the TI Fund, and (z) “Provided by Tenant at Tenant’s Cost” refers to the Initial Premises Tenant Improvements to be paid for out-of-pocket by Tenant.

Tenant shall be solely responsible for ensuring that the design and specifications for Landlord’s Work are consistent with Tenant’s requirements. Landlord shall be responsible for obtaining all permits, approvals and entitlements necessary for Landlord’s Work, but shall have no obligation to, and shall not, secure any permits, approvals or entitlements related to Tenant’s specific use of the Initial Premises or Tenant’s business operations therein. This includes securing county approval of San Diego Regional Hazardous Material Questionnaire which Tenant shall be required to obtain.

During the construction of Landlord’s Work, Landlord shall maintain builder’s risk insurance coverage in commercially reasonable amounts and the General Contractor shall maintain subcontractor default insurance and general liability insurance in commercially reasonable amounts.

(b) **Commencement and Permitting.** Landlord shall commence construction of the Initial Premises Tenant Improvements upon obtaining a building permit (the “**TI Permit**”) authorizing the construction of the Initial Premises Tenant Improvements consistent with the TI Construction Drawings approved by Tenant. Landlord shall diligently pursue all approvals, permits and entitlements necessary to construct Landlord’s Work. The cost of obtaining the TI Permit shall be payable from the TI Fund. Tenant shall reasonably cooperate with Landlord in obtaining the TI Permit. If any Governmental Authority having jurisdiction over the construction of Landlord’s Work or any portion thereof shall impose terms or conditions upon the construction thereof that: (i) are inconsistent with Landlord’s obligations hereunder, (ii) increase the cost of constructing Landlord’s Work, or (iii) will materially delay the construction of Landlord’s Work, Landlord and Tenant shall reasonably and in good faith seek means by which to mitigate or eliminate any such adverse terms and conditions.

(c) **Completion of Landlord’s Work.** Landlord shall substantially complete or cause to be substantially completed the Landlord’s Work in a good and workmanlike manner, in accordance with the TI Permit and other permits associated with Landlord’s Work subject, in each case, to Minor Variations and normal “punch list” items of a non-material nature that do not interfere with Tenant’s access to the Initial Premises or the use of the Initial Premises and with a certificate or temporary certificate of occupancy (or an equivalent approval having been issued) for the Building and the Initial Premises permitting lawful occupancy of the Initial Premises (but specifically excluding any permits, licenses or other governmental approvals required to be obtained in connection with Tenant’s operations in the Initial Premises)(“**Substantial Completion**” or “**Substantially Complete**”). Upon Substantial Completion of Landlord’s Work, Landlord shall require the TI Architect and the General Contractor to execute and deliver, for the benefit of Tenant and Landlord, a Certificate of Substantial Completion in the form of the American Institute of Architects (“**AIA**”) document G704. For purposes of this Initial Premises Work Letter, “**Minor Variations**” shall mean any non-material modifications reasonably required: (i) to comply with all applicable Legal Requirements and/or to obtain or to comply with any required permit (including the TI Permit); (ii) to comply with any request by Tenant for modifications to the Initial Premises Tenant Improvements; (iii) to comport with good design, engineering, and construction practices that are not material; or (iv) to make reasonable adjustments for field deviations or conditions encountered during the construction of the Initial Premises Tenant Improvements.

(d) **Selection of Materials.** Where more than one type of material or structure is indicated on the TI Construction Drawings approved by Landlord and Tenant, the option will be selected at Landlord’s reasonable discretion. As to all building materials and equipment that Landlord is obligated to supply under this Initial Premises Work Letter, Landlord shall select the manufacturer thereof in its reasonable discretion.

(e) **Delivery of the Initial Premises.** When Landlord’s Work (as defined in Section 3(a) above) is Substantially Complete, subject to the remaining terms and provisions of this Section 3(e), Tenant



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shall accept the Initial Premises. Tenant's taking possession and acceptance of the Initial Premises shall not constitute a waiver of: (i) any warranty with respect to workmanship (including installation of equipment) or material (exclusive of equipment provided directly by manufacturers) with respect to the Landlord's Work applicable to the Initial Premises, (ii) any non-compliance of Landlord's Work with applicable Legal Requirements, or (iii) any claim that Landlord's Work in the Initial Premises was not completed substantially in accordance with the TI Construction Drawings (subject to Minor Variations and such other changes as are permitted hereunder) (collectively, a "**Construction Defect**"). Tenant shall have one year after Substantial Completion within which to notify Landlord of any such Construction Defect discovered by Tenant, and Landlord shall use reasonable efforts to remedy or cause the responsible contractor to remedy any such Construction Defect within 30 days thereafter. Notwithstanding the foregoing, Landlord shall not be in default under the Lease if the applicable contractor, despite Landlord's reasonable efforts, fails to remedy such Construction Defect within such 30-day period. If the contractor fails to remedy such Construction Defect within a reasonable time, Landlord shall use its reasonable efforts to remedy the Construction Defect within a reasonable period.

Tenant shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment installed in the Premises. If requested by Tenant, Landlord shall attempt to obtain extended warranties from manufacturers and suppliers of such equipment, but the cost of any such extended warranties shall be paid for out of the TI Fund. Landlord shall promptly undertake and complete, or cause to be completed, all punch list items.

(f) **Commencement Date Delay.** Except as otherwise set forth in the Lease, Delivery of the Initial Premises shall occur when Landlord's Work has been Substantially Completed, except to the extent that completion of Landlord's Work shall have been actually delayed by any one or more of the following causes ("**Tenant Delay**"):

- (i) Tenant's Representative was not available within 1 business day to give or receive any Communication or to take any other action required to be taken by Tenant hereunder;
- (ii) Tenant's request for Change Requests (as defined in Section 4(a) below) whether or not any such Change Requests are actually performed;
- (iii) Construction of any Change Requests;
- (iv) Tenant's request for materials, finishes or installations requiring unusually long lead times provided that Landlord shall endeavor to advise Tenant whether any items require unusually long lead times;
- (v) Tenant's delay in reviewing, revising or approving plans and specifications beyond the periods set forth herein;
- (vi) Tenant's delay in providing information critical to the normal progression of the Project. Tenant shall provide such information as soon as reasonably possible, but in no event longer than one week after receipt of any request for such information from Landlord;
- (vii) Tenant's delay in making payments to Landlord for Excess TI Costs (as defined in Section 5(d) below); or
- (viii) Any other act or omission by Tenant or any Tenant Party (as defined in the Lease), or persons employed by any of such persons which continues for more than 1 business day after Landlord's notice thereof to Tenant.

If Delivery is delayed for any of the foregoing reasons, then Landlord shall cause the TI Architect to certify the date on which the Initial Premises Tenant Improvements would have been Substantially Completed but for such Tenant Delay and such certified date shall be the date of Delivery.



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4. **Changes.** Any changes requested by Tenant to the Initial Premises Tenant Improvements shall be requested and instituted in accordance with the provisions of this Section 4 and shall be subject to the written approval of Landlord and the TI Architect, such approval not to be unreasonably withheld, conditioned or delayed.

(a) **Tenant's Request For Changes.** If Tenant shall request changes to the Initial Premises Tenant Improvements ("**Changes**"), Tenant shall request such Changes by notifying Landlord in writing in substantially the same form as the AIA standard change order form (a "**Change Request**"), which Change Request shall detail the nature and extent of any such Change. Such Change Request must be signed by Tenant's Representative. Landlord shall, before proceeding with any Change, use commercially reasonable efforts to respond to Tenant as soon as is reasonably possible with an estimate of: (i) the time it will take, and (ii) the architectural and engineering fees and costs that will be incurred, to analyze such Change Request (which costs shall be paid from the TI Fund to the extent actually incurred, whether or not such change is implemented). Landlord shall thereafter submit to Tenant in writing, within 5 business days of receipt of the Change Request (or such longer period of time as is reasonably required depending on the extent of the Change Request), an analysis of the additional cost or savings involved, including, without limitation, architectural and engineering costs and the period of time, if any, that the Change will extend the date on which Landlord's Work will be Substantially Complete. Any such delay in the completion of Landlord's Work caused by a Change, including any suspension of Landlord's Work while any such Change is being evaluated and/or designed, shall be Tenant Delay.

(b) **Implementation of Changes.** If Tenant approves in writing the cost or savings and the estimated extension in the time for completion of Landlord's Work, if any, Landlord shall cause the approved Change to be instituted. Notwithstanding any approval or disapproval by Tenant of any estimate of the delay caused by such proposed Change, the TI Architect's determination of the amount of Tenant Delay in connection with such Change shall be final and binding on Landlord and Tenant.

5. Costs.

(a) **Budget For Initial Premises Tenant Improvements.** Before the commencement of construction of the Initial Premises Tenant Improvements, Landlord shall obtain a detailed breakdown by trade of the costs incurred or that will be incurred in connection with the design and construction of the Initial Premises Tenant Improvements (as the same may be amended, the "**Budget**"). The Budget shall be based upon the TI Construction Drawings approved by Tenant and shall include a payment to Landlord of administrative rent ("**Administrative Rent**") equal to 3% of "hard" TI Costs for monitoring and inspecting the construction of the Initial Premises Tenant Improvements and Changes, which sum shall be payable from the TI Fund (as defined in Section 5(d)). Landlord shall make its records with respect to the Initial Premises Tenant Improvements, including invoices from Landlord's contractors that shall be paid from the TI Allowance, monthly project cash flow projections, and monthly budget reconciliations, available to Tenant on an "open book" basis throughout the design and construction of the Initial Premises Tenant Improvements.

(b) **TI Allowance.** Landlord shall provide to Tenant a tenant improvement allowance (the "**TI Allowance**") of \$239.00 per rentable square foot of the Initial Premises.

The TI Allowance shall be disbursed in accordance with this Initial Premises Work Letter. Tenant shall have no right to the use or benefit (including any reduction to or payment of Base Rent) of any portion of the TI Allowance not required for the construction of (i) the Initial Premises Tenant Improvements described in the TI Construction Drawings approved pursuant to Section 2(d) or (ii) any Changes pursuant to Section 4.

In addition to the TI Allowance, Landlord shall provide Tenant with one test fit for the Initial Premises prepared by McFarlane Architects, the Landlord's Project architect, but in no event shall Landlord be required to pay any costs in excess of \$0.15 per rentable square foot of the Initial Premises for such test fit.



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(c) **Costs Includable in TI Fund.** The TI Fund shall be used solely for the payment of design, permits and construction costs in connection with the construction of the Initial Premises Tenant Improvements, including, without limitation, the cost of electrical power and other utilities used in connection with the construction of the Initial Premises Tenant Improvements, the cost of preparing the Space Plan and the TI Construction Drawings, all costs set forth in the Budget, including Landlord's Administrative Rent, Landlord's out-of-pocket expenses, costs resulting from Tenant Delays, the cost of Changes and a project management fee of up to 1% of the "hard" TI Costs to a third party project manager selected by Tenant and reasonably approved by Landlord (collectively, "**TI Costs**"). Notwithstanding anything to the contrary contained herein, the TI Fund shall not be used to purchase any furniture, personal property or other non-Building system materials or equipment, including, but not limited to, AV equipment, racks for switches or wall with backboard for mounting equipment, CAT6 cabling or any other tele-data cabling or infrastructure required for the availability of wifi service within the Premises, non-ducted biological safety cabinets and other scientific equipment not incorporated into the Initial Premises Tenant Improvements.

(d) **Excess TI Costs.** Landlord shall have no obligation to bear any portion of the cost of any of the Initial Premises Tenant Improvements except to the extent of the TI Allowance. If at any time and from time-to-time, the remaining TI Costs under the Budget exceed the remaining unexpended TI Allowance ("**Excess TI Costs**"), the monthly disbursements of the TI Allowance shall be made in the proportion that the remaining TI Allowance bears to the outstanding TI Costs under the Budget, and Tenant shall fund the balance of each such monthly draw. For purposes of any litigation instituted with regard to such amounts, those amounts required to be paid by Tenant will be deemed Rent under the Lease. The TI Allowance and Excess TI Costs are herein referred to as the "**TI Fund**." Notwithstanding anything to the contrary set forth in this Section 5(d), Tenant shall be fully and solely liable for TI Costs and the cost of Minor Variations in excess of the TI Allowance.

6. Tenant Access.

(a) **Tenant's Access Rights.** Landlord hereby agrees to permit Tenant access, at Tenant's sole risk and expense, to the Initial Premises (i) 30 days prior to the Commencement Date to perform any work ("**Tenant's Work**") required by Tenant other than Landlord's Work, provided that such Tenant's Work is coordinated with the TI Architect and the General Contractor, and complies with the Lease and all other reasonable restrictions and conditions Landlord may impose, and (ii) prior to the completion of Landlord's Work, to inspect and observe work in process; all such access shall be during normal business hours or at such other times as are reasonably designated by Landlord. Notwithstanding the foregoing, Tenant shall have no right to enter onto the Initial Premises or the Project unless and until Tenant shall deliver to Landlord evidence reasonably satisfactory to Landlord demonstrating that any insurance reasonably required by Landlord in connection with such pre-commencement access (including, but not limited to, any insurance that Landlord may require pursuant to the Lease) is in full force and effect. Any entry by Tenant shall comply with all established safety practices of Landlord's contractor and Landlord until completion of Landlord's Work and acceptance thereof by Tenant.

(b) **No Interference.** Neither Tenant nor any Tenant Party (as defined in the Lease) shall interfere with the performance of Landlord's Work, nor with any inspections or issuance of final approvals by applicable Governmental Authorities, and upon any such interference, Landlord shall have the right to exclude Tenant and any Tenant Party from the Initial Premises and the Project until Substantial Completion of Landlord's Work.

(c) **No Acceptance of Premises.** The fact that Tenant may, with Landlord's consent, enter into the Project prior to the date Landlord's Work is Substantially Complete for the purpose of performing Tenant's Work shall not be deemed an acceptance by Tenant of possession of the Premises, but in such event Tenant shall defend with counsel reasonably acceptable by Landlord, indemnify and hold Landlord harmless from and against any loss of or damage to Tenant's property, completed work, fixtures, equipment, materials or merchandise, and from liability for death of, or injury to, any person, caused by the act or omission of Tenant or any Tenant Party.



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7. Miscellaneous.

(a) **Consents.** Whenever consent or approval of either party is required under this Initial Premises Work Letter, that party shall not unreasonably withhold, condition or delay such consent or approval, unless expressly set forth herein to the contrary.

(b) **Modification.** No modification, waiver or amendment of this Initial Premises Work Letter or of any of its conditions or provisions shall be binding upon Landlord or Tenant unless in writing signed by Landlord and Tenant.

(c) **No Default Funding.** In no event shall Landlord have any obligation to fund any portion of the TI Allowance or to perform any Landlord's Work during any period that Tenant is in Default under the Lease.



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Schedule 1

Space Plans



5505 MOREHOUSE DRIVE
FIRST LEVEL CONCEPT PLAN
SCALE: 1" = 20'-0"



06/06/21



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5505 MOREHOUSE DRIVE -
SECOND LEVEL CONCEPT PLAN
SCALE: 1" = 20'-0"

04/11/21

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SECOND LEVEL CONCEPT PLAN
SCALE: 1" = 20'-0"



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Schedule 2

TI Specifications

ARTIVA BIOTHERAPEUTICS BASIS OF DESIGN
5505 MOREHOUSE DRIVE, SAN DIEGO, CALIFORNIA

2.0 Architectural Artiva Biotherapeutics Basis of Design**2.1 Building Description****General Description**

Year Building Shell Constructed:	1985
Governing Building Code:	1982 UBC
Number of Stories above Grade:	3
Number of Stories below Grade:	1 (parking)
Type of Construction per California Building Code:	Type 11-B
Type of Occupancies per California Building Code:	B, S-2
Occupancy Separations:	2-HR (B- 1 st , 1 st -2 nd , 2 nd -3 rd)
Hazardous Material Control Areas:	See Section 2.2 and Exhibit 1
Fire Sprinklers:	Yes
Structural Frame:	Steel, 2-HR (except the roof)
Exterior Walls	Curtainwall; Non-rated
Floor Construction:	Concrete Fill, Steel Pan, 2-HR
Roof Construction:	Concrete Fill, Steel Pan, Non-rated; TPO membrane

2.2 State & Local Compliance

Design and construction shall conform to State and Local building codes and ordinances to include but not limited to the most current version of the following documents:

- CA Mechanical Code
- CA Plumbing Code
- CA Building Code
- CA Fire Code
- Local Fire Department Regulations
- National Fire Protection Association

2.3 Architectural**Interior Partitions:**

- 3-5/8" metal studs typical, gauge and spacing as required by code, with 5/8" type X gypsum board.
- Mold and mildew resistant gypsum board shall be provided at all wet walls and in the GMP area
- Standard interior partitions penetrate ceiling
- Full height partitions to underside of structure where sound/security/rating requirements occur
- Fire rated assemblies, full height, tunnel and shaft wall construction per code
- Flat stop backing required in any walls where casework, appliances, equipment or fixtures will be mounted
- Coordination with structural engineer will be required for any specialty requirements with heavy loads and tall walls exceeding max height requirements for 3-5/8" studs.
- Drywall finish shall be level 4 at all areas. Level 5 required at any walls where wall coverings to be installed.



Insulation:

- Sound attenuation blankets to fit width of walls at all Offices, Conference Rooms, and Restrooms .
- R-19 insulation shall be provided at exterior walls

2.4 Doors, Frames & Hardware

Offices/ General Use Areas:

- Interior conference and office assemblies to be 3' x 8'- 10" minimum wood stained doors and side lites with aluminum knockdown frames by Wilson Partitions or equivalent
- Restroom doors to be 3' x 8'-0" wood stain doors with aluminum knockdown frames by Wilson Partitions or equivalent
- Lever style, heavy duty, satin aluminum hardware with components and ratings per code
- Keying to be compatible with Landlord's master system

Lab/ Lab Support/ Equipment/ Storage Areas:

- Door Assemblies ore 3' x 8'-1 0" or pairs of wood stained doors with vision lites and/or side lites with aluminum knockdown frames by Wilson Partitions or equivalent
- Lever style, heavy duty, satin aluminum cylindrical passage lockset hardware with components and ratings per code
- Include components and ratings as required by code
- Keying to be compatible with Landlord's master system

GMP Areas:

- Door Assemblies ore 3' x 8' -0" or pairs of seamless hollow metal doors with vision lites in hollow metal frames

2.5 Ceiling System

General:

- T-Bar suspension installation per code
- Utilize Seismic clips at perimeter of T-bar in lieu of 2" wall angle

Open Office, Break Room

- Exposed to structure

Private Office Areas

- Ceiling height to be 10' -0" unless existing condition prohibits
- USG XL 2' x 2', 15/16" exposed T-Grid, white
- USG of equivalent 2' x 2' acoustic tile, Orion 75 with beveled tegular edge, white

Lab Areas

- Ceiling height to be 9'-0" unless existing condition prohibits
- Armstrong XL 2' x 4', 15/16" exposed T-grid, white
- Armstrong or equivalent 2' x 4' vinyl clad , white



Lab Support/Equipment and Storage Areas

- Armstrong XL 2' x 4', 15/16" exposed T-grid, white
- Armstrong or equivalent 2' x 4' vinyl clad, white

GMP Area

- Ceiling height to be 8'-2" unless existing condition prohibits
- Epoxy- pointed suspended 5/8" gypsum board over metal stud ceiling joists
- USG 15/16" Donn Brand Centricitee heavy duty suspension ceiling system with square trim edge and gasket and seal or equivalent

2.6 Window Coverings

Exterior windows will be provided with window coverings by MechoShade Systems or Equivalent roller shades, with manual controls. Window coverings for upper windows in high bay open areas will be motorized .

2.7 Cabinetry

Architectural Millwork

- Construction designation APA C-D plugged with exterior glue, 3/4' thick or 3/4" high-pressure particle board for break rooms, copy/work rooms and conference rooms
- Countertops shall be of a solid surface material
- Concealed euro style hinges
- Adjustable shelf standards
- Stainless steel Bar pulls and/or 4mm wire pulls
- Full extension, heavy-duty drawer slides

Lab Casework

- Metal or plastic laminate with phenolic resin countertops

GMP Casework

- Metal or plastic laminate with phenolic resin countertops, or
- Stainless Steel with Stainless Steel countertops

2.8 Floor Covering

Office and Admin Areas

- Monterey or equal, overview multi-level loop pattern with 4" rubber base at offices, conference rooms, under systems furniture
- Polished and sealed concrete, elsewhere.

Lab/ Lab Support/ Equipment/ Storage Areas

- Vinyl Composition Tile, Armstrong or equivalent, 12" x 12" x 1/8" with 4" rubber coved base; Moisture barrier, as required

GMP Area

- sheet Vinyl flooring with coved base or coved epoxy flooring with 6" base, trimmed edge

Shipping/Receiving

- Sealed concrete with 4" rubber base



Lobby Entry and Break Area

- Polished and sea led concrete

2.9 lab Equipment

Fume Hoods:

Infrastructure for maximum of (6) 8' fume hoods on the first floor north side, infrastructure for (8) 8' fume hoods on the first floor south side, and infrastructure for (10) 8' fume hoods on the second floor north side. Only (2) 8' fume hoods are to be installed at the project commencement in the second floor north lab. The fume hoods may refurbished units in good working and cosmetic condition if available.

Fume Hood Requirements:

- 36" deep minimum VAV hoods
- AIR, VAC – both sides
- Combo sash
- Lattice rods
- 3" grommets at each side with conduit for electrical cords
- (2) duplexes – at each side
- (2) Flammable Cabinets

Autoclave with point of use boiler in good working and cosmetic condition (2) under counter glass wash units with DI rinse

All other equipment, including non-ducted bio safety cabinets, to be provided by Tenant.

2.10 Fire Protection

Fire Sprinklers

- Spacing and number of heads to comply with recommendations of NFPA 13 for type of occupancy

Fire Extinguishers

- Semi recessed aluminum cabinets. Quantity and type as required by code.

Fire Alarm

- All devices required by code





BASIS OF DESIGN MECHANICAL

A. GENERAL:

1. All work shall be in conformance with current applicable codes, standards and references as adopted by the authorities having jurisdiction including, but not limited to:
 - a. California Building Code (CBC)
 - b. California Mechanical Code (CMC)
 - c. California Plumbing Code (CPC)
 - d. California Fire Code (CFC)
 - e. California Code of Regulations (CCR) – Title 24
 - f. Applicable local codes and ordinances.

B. REQUIREMENTS:

1. Summer-Winter HVAC for laboratory, office and ancillary support areas.
2. Building mechanical air exhaust systems for all laboratories.
3. Building mechanical air exhaust systems for all spaces requiring general exhaust.
4. Specialty exhaust systems to handle fumes from the laboratory fume hoods as necessary.

C. MECHANICAL SYSTEMS:

1. Lab and Classified Areas
 - a. 1ST floor south and second floor labs: New 100% outside air modular air handling units with hot water heating coils and chiller water cooling coils, CAV boxes with hot water reheat coils, hot water piping, supply air ducts, diffusers, BMS controls, testing and balancing.
 - b. 1ST floor north labs: New 100% outside air, packaged DX rooftop air conditioner with hot water heating coils, venturi type CAV valves with hot water reheat coils, hot water piping, supply and recirculating air ducts, low wall returns for ISO 7 rooms, fan-powered HEPA filters with room-side replaceable media, BMS controls, Magnehelic gages to measure differential pressure at classified are doorways, testing and balancing.
 - c. New rooftop utility set exhaust fans, exhaust CAV boxes for general exhaust, CAV venturi valves for classified areas and constant volume venturi valves for fume hoods, exhaust air ducts, diffusers, BMS controls, testing and balancing.



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BASIS OF DESIGN MECHANICAL

2. Office Areas
 - a. Office Areas: Variable Refrigerant Flow DX Systems, supply and return ductwork, refrigerant piping, diffusers, thermostat installation, testing and balancing.
 - b. A separate VRF system will serve each office area (2-total).

D. DESIGN CRITERIA:

1. Outdoor design conditions:
 - a. Summer: 91° F DB, 72° F WB
17° F DB outdoor daily range
 - b. Winter: 32° F DB
2. Indoor design conditions:
 - a. Laboratory: 72° F DB $\pm$ 2° F DB
 $\leq$ 60% RH
 - a. Office: 74° F $\pm$ 2° F DB
No Humidity Control
3. Air Change Rate:
 - a. The air change rate in the second floor and first floor south lab areas will be at least 11 air changes per hour, based on 9 ft ceiling height.
 - b. The first floor north classified rooms, QC, and the entry vestibule/gown/de-gowns rooms will be served by up to 10,600 cfm of single pass air for cooling and pressurization. Air change rates in the classified areas will be 60 for the ISO 7 rooms and 20 for ISO 8 rooms, through the use of fan-powered HEPA filters. Other non-classified rooms will be served by 4-pipe fan coils. Non classified areas will receive 6-8 air changes per hour. Ceiling heights in the classified areas will very likely need to be lower than 9' due to the high density of fan-powered HEPA filters and ductwork above the ceiling.
 - c. The air change rate in the office areas will be dictated by loads.
4. Noise Level:
 - a. All lab areas will be designed for a maximum noise level of NC-55, office areas will be designed for NC-35 and conference rooms will be designed for NC-30.





BASIS OF DESIGN MECHANICAL

E. EQUIPMENT:

1. 100% OSA packaged DX air conditioners (serving level 1 classified areas): Horizontal draw thru unit(s) complete with pre-filters, final filters, heating coil, cooling coil and centrifugal plenum fans. The supply fan and the associated VFD will be fully redundant.
2. 100% OSA modular Air Handling Units: Horizontal draw thru unit(s) complete with pre-filters, final filters, hot water heating coil, DX cooling coil and centrifugal plenum fans.
3. Variable refrigerant flow (VRF) systems: Outdoor Condensing Units with condensing coils, compressors, AC inverter. Indoor Heat Recovery Units. Indoor Fan Coil Units with evaporator coils, filters, fans.
4. Building Exhaust Fans:
 - a. Labs: SISW arrangement 10 centrifugal exhaust fans with B1 centrifugal wheel or Class I airfoil wheel.
 - b. General: Roof mounted downblast centrifugal fans.
 - c. The exhaust fan and the associated VFD serving the level 1 classified areas will be fully redundant.
5. Fan -powered HEPA filters
 - a. Room-side replaceable media, EC motors with manual speed control, challenge port, aluminum exposed materials
6. Diffusers and Return Air Grilles:
 - a. Flush with ceiling, modular, perforated type.
7. Fire/Smoke Dampers:
 - a. Damper and actuator assembly approved by UL555S testing. Actuator outside of airstream. Rated per wall rating required.

F. MATERIALS:

1. Ductwork:
 - a. Ductwork will be fabricated from zinc coated sheet metal steel conforming in construction and weight to the ASHRAE and SMACNA Guide, latest Edition. All





BASIS OF DESIGN MECHANICAL

concealed indoor supply and return air ducts shall be insulated with R-4.2 minimum foil-faced fiberglass insulation. Outdoor supply and return air ducts shall be insulated with R-8 minimum foil-faced fiberglass insulation.

- b. Distribution ductwork downstream of main ducts shall be rectangular ducts of galvanized steel or pre-fabricated spiral lock-seam ducts and fittings.
 - c. Final connection to ceiling diffusers and return air grilles in the office and common areas shall be made with a flexible duct.
 - d. Ductwork to be used in the classified rooms will be cleaned at the fabrication facility and capped until installed.
2. Specialty Exhaust Ductwork:
- a. Exhaust ductwork not exposed to high concentrations of chemicals will be constructed of galvanized steel.
 - b. Fume hood exhaust ductwork will be constructed of 304 stainless steel from fume hood to main exhaust duct.
3. Vibration Isolation:
- a. Spring isolators will be provided internally to isolate fans in air handling units and larger DX units. Smaller DX units to be provided with vibration isolation curbs as necessary. Spring hangers to be provided for VRF fan coil units.
4. Piping:
- a. Heating Hot Water: Type "L" Copper tube pipe and wrought copper fittings up to 2" in diameter, Schedule 40 black steel pipe and fittings above 2" in diameter.
 - b. Necessary valves and other piping accessories will be provided where required for system control.
 - c. Hot water piping will be insulated with heavy density fiberglass with vapor barrier jacket. Exposed and insulated piping will be jacketed with aluminum. Per 2016 Title 24 Code: Minimum 1" thick for heating hot water piping below 1" in diameter. Minimum 1.5" thick for heating hot water piping above 1" in diameter.
5. HVAC Controls (BMS):
- a. All control points from new equipment will be integrated into the BMS system via BACnet. The BMS will automatically start the systems and provide the necessary control, monitoring, alarms and trending required for energy management.





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END OF SECTION

5



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1.1 5505 Morehouse Drive – Artiva TI

1.1.1 Electrical Systems Description

A. Electrical Distribution

1. Normal Utility Power/ Main Building Switchgear
 - a. Provide power from existing SDGE service of 3000A 480Y/277V 3 phase 4 wire system.
 - b. Suite shall be provided with a minimum 600A 480Y/277V 3 phase 4 wire normal power feed.
 - c. Contractor shall coordinate with electrical engineer to provide complete short circuit, coordination and Arc Flash report for existing switchgear.
2. Emergency/Standby Power
 - a. Provide power from existing 500kw emergency power system consisting of a diesel fueled emergency generator in shell portion of project. Tenant space shall be provided with emergency distribution system to include panelboards and transformers that allow the tenant to have 5w/sqft.
 - b. The following systems and equipment shall be supplied with emergency/standby power based upon Code requirements:
 - Emergency and exit lighting (if not supplied with internal batteries)
 - Fire/smoke dampers
 - Fire Alarm system
 - Smoke Evac System
 - Emergency Lighting systems
 - c. The following processes and equipment shall be provided by emergency/standby power:
 - Building Management System (BMS)
 - Specialty lab equipment designated by tenant
 - Fume hood exhaust system equipment
 - Miscellaneous Equipment (as identified on equipment list)
 - Uninterruptible Power System (UPS) if provided by tenant
3. Uninterruptible Power Systems (UPS)
 - a. Essential production control systems and equipment shall be provided with a centralized uninterruptible power system if required by tenant.
4. Distribution Equipment
 - a. Panelboards
 - Panelboards for lighting and mechanical shall be 480Y/277V 3φ 4W or 208Y/120V 3φ 4W and shall be located in electrical equipment rooms or flush in new walls. All new panelboards shall be rated for calculated fault current ratings.
 - All panelboards shall have bolt-on circuit breakers, 42-pole space, bus ratings (as indicated on the panel schedules), copper bussing, and shall be either surface or flush mounted (as indicated on plans).
 - Panelboards shall be provided with a copper ground bus. All new 208Y/120V 3φ 4W panelboards shall be provided with 200% rated neutral bus.

- b. Feeders
 - Feeders shall be copper conductors (Type T HHN or THWN) routed in electrometallic tubing (EMT), polyvinylchloride (PVC) conduit, or rigid galvanized steel (RGS) conduit. EMT shall be used in all indoor, concealed locations where the feeder is protected from damage or weather. RGS conduit shall be used in exterior applications or where the conduit may be exposed to physical damage. PVC shall be used for all below-grade applications.
 - Feeders shall be sized according to the singleline diagram in the construction documents.
 - Feeders shall be rack-mounted in accessible ceiling spaces or routed below grade under the slab.
5. Branch Circuitry
 - a. Conduit and Wire
 - Branch circuits for all lighting, power circuits serving convenience outlets, control power, etc. shall be nominally sized as 120V/277v 20A.
 - Branch circuits may be increased in size for specific loads or as necessary to prevent excessive voltage drop on longer circuits.
 - MC cable to be provided as needed for concealed wall wiring, and other approved locations.
6. Electrical Devices
 - a. Electrical devices including (receptacles and switches) shall be rated according to the load served.
 - b. Electrical devices shall be white in color with white thermoplastic cover plates.
 - c. Cover plates for receptacles and junction boxes shall be labeled indicating the circuit and panelboard from which the device is fed.
7. Lighting Systems
 - a. Fixtures shall be suitable for the application including the ability to provide egress illumination where required.
 - b. Fixtures shall meet U.L. requirements and selection and placement of fixtures shall comply with ADA requirements.
 - c. All lighting fixtures shall operate at 277V or 120V unless specifically noted otherwise.
 - d. Fixture lamping and quantities must comply with the Title 24 energy budget.
 - Fixtures to be LED where possible to extend lamp life and reduce wattage
 - e. Dimming drivers to be provided for all new fixtures unless specified otherwise.
 - f. Photocell control shall be provided for all Title 24 required areas.
 - g. Motion sensors shall be provided for all lab, office, storage and support areas.

8. Lighting Control Systems
 - a. Lighting control shall comply with Title 24 requirements (including over-ride control for automatically shutting the lights off at prescribed periods of time and the ability to over-ride the lighting control for up to two hours of use).
 - b. Lighting control equipment shall include a programmable lighting control panel, relay panels (quantity as necessary), over-ride switches (distributed throughout the space), and interconnecting conductors. Control panel to be provided with required hardware and software for interface with mechanical energy management systems.
 - c. Each office area shall be controlled by dual-level switching or dimming for local control. This design selection was chosen based on meeting the California State 2020 Title 24 requirements as well as giving a better automatic control reducing overall energy usage.
9. Mechanical System Connections
 - a. Power shall be provided from the 480Y/277V or 208/120V system for line voltage to mechanical equipment.
 - b. Control power wiring regardless of voltage shall be by the mechanical contractor.
 - c. Smoke control systems shall be provided and installed by mechanical.
 - d. Motor starters and disconnect switches shall be provided by the electrical contractor according to the control wiring diagrams provided by the mechanical contractor.
10. Telephone/Data Systems
 - a. Telephone, security and data system 120V power connections at locations required.
 - b. Provide conduit riser system as required for interconnection between floors.
 - c. Cabling system design, system hardware, system cable and installation of signal system is not part of the electrical contract.
11. Security Systems
 - a. Provide required conduit, junction boxes and power sources for security devices.
12. Grounding

Electrical grounding shall be provided as follows:

 - a. Electrical code required systems and equipment grounding.
 - b. Ground bus at telephone and data rooms
 - c. Ground bus at laboratory and manufacturing areas where solvent use is identified for code required vessel grounding and bonding.



13. Emergency Transfer Switch

- a. Automatic Transfer switch shall be furnished as 480V 3ph configuration type.

1.2 Electrical Systems Design Criteria

1.2.1 Codes, Guidelines and Standards

Electrical systems and equipment shall be designed to comply with the Codes, Guidelines, and Standards identified in NFPA 70, NFPA 70E and NFPA 110.

1.2.2 Power Systems

In general, electrical outlets to be provided to supply power to all offices, systems furniture, Conference Rooms, appliances, mechanical equipment, etc.

A. Common Area Support

1. One (1) duplex receptacle within 25 feet of all mechanical equipment for servicing and maintenance.
2. One (1) duplex convenience receptacle for approximately every 250 square feet.
3. At least one (1) duplex receptacle installed 40'-0" on center in circulation spaces.

B. Coffee Stations

1. At least two (2) duplex receptacles will be installed at each coffee station. In general, receptacles will be located above counter tops and will be of the GFCI type.

C. Conference Rooms

1. One (1) recessed, shared ganged floor mounted receptacle at conference room table. Location to be verified with table manufacturer.
2. Large Conference Rooms: Two (2) recessed shared ganged floor mounted receptacle at each end of the table. Location to be verified with table manufacturer.

D. MDF/IDF Rooms

1. MDF/IDF room(s) shall be provided with a minimum of two (2) generator back up 120V, 20A branch circuits and two (2) 120V, 20A general-purpose receptacles will be required and must be supplied from the building's normal distribution system. Coordinate with tenant for exact requirements.

E. Offices/Open Office Areas

1. Connections to systems furniture in open office areas will utilize floor mounted outlets where concealed wall space is unavailable.
2. Systems furniture shall be supplied with three (3) dedicated branch circuits to each cluster of six cubicles for three-circuit configurations. Four (4) dedicated branch circuits shall be provided to each cluster of eight cubicles for four-circuit configurations.
3. Special purpose outlets will be installed for all specialized equipment such as printers, copiers, fax machines and appliances.

F. Restrooms

1. At least one (1) duplex receptacle will be installed in each restroom. Typically, receptacles will be located above the vanity and will be of the GFCI type.



- G. Storage Rooms
 - 1. At least one (1) duplex receptacle installed.
- H. Testing
 - 1. Contractor to provide electrical GFI testing, breaker testing and cable Meggar testing for entire electrical system. Breaker testing shall be done on all circuit breakers 400A and above.
- I. Coordination Study and Arc Flash Study
 - 1. Contractor to engage approved engineer to perform a complete coordination study and Arc Flash report with labeling for entire TI project



Schedule 3

Initial Premises Critical Dates Schedule and Project Schedule¹

Based on 04/19/2021 NTP Date	*Tenant Improvement
Final CP-4 Space Plan	04/27/2021
Final CP-5 Space Plan	06/07/2021
Final Artiva Equipment List	05/12/2021
TI: CP-4 Design Development Complete	05/28/2021 (Followed by 5 day review and approval)
TI: CP-5 Design Development Complete	06/21/2021 (Followed by 5 day review and approval)
City Permit Approval (C&S: CP-2)	05/04/2021
City Permit Submittal Complete (TI: CP-4) (Submit for plan check)	07/20/2021 (Followed by 5 day review and approval)
City Permit Submittal Complete (TI: CP-5) (Submit for plan check)	08/03/2021 (Followed by 5 day review and approval)
City Permit Approval (TI: CP-4)	10/14/2021
City Permit Approval (TI: CP-5)	10/28/2021
CP-4 Substantial Completion	04/15/2022
CP-5 Substantial Completion	06/14/2022

* Review and approval dates are to be business days.

If any of the stages noted above (e.g., Space Plan, Schematics etc.) is not finalized and approved by Tenant and Landlord within the applicable 5, 10 or 15-day period noted above after initial delivery to Tenant for review, then each day thereafter until applicable stage is finalized shall constitute Tenant Delay (unless failure to complete such stage resulted from Landlord's failure to provide a response within the required time period).

¹ References in this Schedule 3 to "CP-4" mean the "Initial Premises".



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Schedule 4

Core & Shell Specifications

SHELL AND CORE DESCRIPTION
5505 MOREHOUSE DRIVE, SAN DIEGO, CALIFORNIA

1.0 Architectural and Structural Shell and Core Description**1.1 Building****Description****General Description**

Year Building Shell Constructed:	1985
Governing Building Code:	1982 UBC
Number of Stories above Grade:	3
Number of Stories below Grade:	1 (parking)
Type of Construction per California Building Code:	Type II- B
Type of Occupancies per California Building Code:	B, S-2
Occupancy Separations:	2-HR (B-1 st , 1 st -2 nd , 2 nd -3 rd)
Hazardous Material Control Areas:	See Section 2.2 and Exhibit 1
Fire Sprinklers:	Yes
Structural Frame:	Steel, 2-HR (except the roof)
Exterior Walls	Curtainwall; Non-rated
Floor Construction:	Concrete Fill, Steel Pan, 2-HR
Roof Construction:	Concrete Fill, Steel Pan, Non-rated; TPO membrane

1.2 Control Areas

Life science buildings need to house hazardous materials that are used in scientific research. In buildings of B occupancy, the building code (CBC Section 414) requires that hazardous materials be contained in areas called control areas.

Each control area is permitted to have a maximum allowable quantity of hazardous materials, and each control area must be separated by fire resistive construction as outlined in the building code. Each floor level is permitted to have a certain number of control areas and a certain percentage of the maximum allowable quantities of hazardous materials.

The first floor of a building is permitted to have four control areas, and each area is permitted to have 100% of the maximum allowable quantities of hazardous materials.

The second level of a building is allowed to have three control areas but the percentage of the maximum allowable quantities of hazardous materials is limited to 75% of the maximum allowed.

The third level of the building is allowed to have two control areas but the percentage of the maximum allowable quantities of hazardous materials is limited to 50% of the maximum allowed.

The first level of a basement can also have three control areas but the percentage of the maximum allowable quantities of hazardous materials is limited to 75% of the maximum allowed.

The maximum allowable quantity of hazardous materials can be doubled in each control area if the building is sprinklered, and this quantity can be doubled again if the quantities are contained in one-hour fire resistive cabinets.

1.1



Control areas must be separated by one or two-hour fire resistive construction per CBC 414 when the tenant improvement are constructed. Fire rated construction can be constructed of various assemblies (I.e. spray applied fire proofing or gypsum board assemblies).

1.3 Restrooms

Each floor is being provided with a set of restroom with four plumbing fixtures for men and four plumbing fixtures for women. Each restroom has two lavatories and are accessible to the disabled. Finishes will be as follows:

- Floors and wet walls will be finished with porcelain tile (Full height on wet walls)
- Vinyl wall covering or paint above tile and on non-wet walls.
- Stone slab countertops with full coverage laminate aprons.
- Full height toilet partitions
- Stainless steel Bobrick accessories
- Drywall ceilings with recessed lights and cove lighting above toilets, urinals and mirrors

1.4 Elevators

There two passenger elevators and one service elevator. One passenger elevator has a capacity of 2,500 lbs. and the other passenger elevator has a capacity of 3,000 lbs. The service elevator is capable of lifting up to 5,000 lbs. and accommodating a 8' long fume hood.

1.5 Stairs

The building has two exit stairs. One stair connects the first floor through the third floor and exits out the main lobby on the first floor. The second stair connects roof access all the way down to the basement level and exits at the basement level.

1.6 Structural Description

Overview

The existing building is steel framed with a ground level partial subterranean pre-cast concrete framed basement.

Gravity System

The existing building is a three-story steel-framed moment frame structure over a single level of partial subterranean parking. An existing seismic joint occurs between the north and south portions of the building, which is located on the east side along the south side of the core stair. The existing first-floor level is framed with 20 inch deep pre-cast concrete double tees supported by pre-cast concrete girders and perimeter masonry bearing walls.

The existing second and third-floor framing consists of 3 inch composite deck with 2-1/2 inch thick concrete topping which act compositely with wide flange beams through the use of shear studs. The existing roof framing consists of a 3 inch composite deck with 2-1/2 inch thick concrete topping which act compositely with wide flange beams through the use of shear studs. A computer model analysis of the second and third floor framing was performed, and it was determined that the existing floor has the capacity to support at least 125 PSF with in the typical framed areas (structural bays are 20' wide by 38' to 42' long).

1.2



A new atrium structure will be centered between the two buildings. The west side of the atrium will contain conference huddle rooms at each floor level, steel framed and aligned with the existing building floors. Seismic joints will occur at the 3 sides of these huddle room where adjacent to the existing floor. The east side of the atrium will have a pedestrian bridge at the second and third floor connected to the south existing building. A seismic joint will occur at the north end of the bridge.

New steel framed exit stairs in the lobby will occur at the south east side of the pedestrian bridge. The stair will extend from the first floor to the third floor. The new floors at the atrium areas will consist of 3 inch deep metal deck with 2 1/2 inch light weight concrete topping.

Roof construction of the atrium consists of 3 inch steel deck supported by steel beams. The roof will be Support on posts extended from the top of the existing building columns with slide bearing connections.

Lateral Force Resisting System

The existing lateral force resisting system consists of the floor and roof systems acting as horizontal diaphragms which transfer lateral forces to the vertical elements of the lateral force resisting system which consist of steel moment frames. We anticipate that the proposed improvements will not require seismic upgrade to the existing lateral force resisting system.

The atrium roof will consist of a stand-alone structure with braced frames providing lateral resistance. The braced frames with either be buckling-restrained braced frames or special concentric braced frames.

Foundation System

The existing foundation system consists of caissons that vary in depth to support the building on formational soils.

1.3



BASIS OF DESIGN MECHANICAL

A. GENERAL:

1. All work shall be in conformance with current applicable codes, standards and references as adopted by the authorities having jurisdiction including, but not limited to:
 - a. California Building Code (CBC)
 - b. California Mechanical Code (CMC)
 - c. California Plumbing Code (CPC)
 - d. California Fire Code (CFC)
 - e. California Code of Regulations (CCR) – Title 24
 - f. Applicable local codes and ordinances.

B. REQUIREMENTS:

1. Summer-Winter HVAC for laboratory, office and ancillary support areas on all floors.
2. Building mechanical air exhaust systems for all laboratories.
3. Building mechanical air exhaust systems for all restrooms and other spaces requiring general exhaust.
4. Specialty exhaust systems to handle fumes from the laboratory fume hoods as necessary.

C. MECHANICAL SYSTEMS:

1. Lab Areas
 - a. 1st floor south and 2nd floor labs: New 100% outside air modular air handling units with hot water heating coils and chiller water cooling coils, CAV boxes with hot water reheat coils, hot water piping, supply air ducts, diffusers, BMS controls, testing and balancing.
 - b. 1st floor north labs: New 100% outside air rooftop packaged unit with hot water coils, CAV boxes with hot water reheat coils, hot water piping, supply air ducts, diffusers, BMS controls, testing and balancing.
 - c. New rooftop utility set exhaust fans, exhaust CAV boxes for general exhaust, constant volume venturi valves for fume hoods, exhaust air ducts, diffusers, BMS controls, testing and balancing.



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BASIS OF DESIGN MECHANICAL

- d. New outdoor-rated heating hot water plant including two (2) high efficiency natural gas-fired boilers with primary pumps, two (2) secondary pumps with VFD, expansion tank, buffer tank, chemical pot feeder, associated heating hot water distribution piping, BMS controls, testing and balancing.
- 2. Office Areas
 - a. Office Areas: Variable Refrigerant Flow DX Systems, supply and return ductwork, refrigerant piping, diffusers, thermostat installation, testing and balancing.
 - b. One separate VRF system will serve each office area. Four (4) existing VRF condensing units will be used to serve the 1st & 2nd floor offices.
- 3. Atrium
 - a. New 100% OSA rooftop packaged heat pump, supply and return ductwork, diffusers, thermostat installation, testing and balancing.
 - b. Exhaust fans & make-up air as needed for smoke control.
- 4. Central Plant
 - a. An existing 160 Ton rooftop chilled water plant including chiller, chilled water pumps, and chilled water piping loop shall be re-used to serve the 1st and 2nd floor lab AHUs.

D. DESIGN CRITERIA:

- 1. Outdoor design conditions:
 - a. Summer: 91°F DB, 72°F WB
17°F DB outdoor daily range
 - b. Winter: 32°F DB
- 2. Indoor design conditions:
 - a. Laboratory: 72°F DB $\pm$ 2°F DB
 $\leq$ 60% RH
 - a. Office: 74°F $\pm$ 2°F DB
No Humidity Control





BASIS OF DESIGN MECHANICAL

3. Air Change Rate:
 - a. The air change rate in the lab areas will be at least 11 air changes per hour, based on 9 ft ceiling height.
 - b. The air change rate in the office areas will be dictated by loads.
4. Noise Level:
 - a. All lab areas will be designed for a maximum noise level of NC-55, office areas will be designed for NC-35 and conference rooms will be designed for NC-30.

E. EQUIPMENT:

1. 100% OSA packaged DX air conditioners: Horizontal draw thru unit(s) complete with pre-filters, final filters, heating coil, cooling coil and centrifugal plenum fans.
2. 100% OSA modular Air Handling Units: Horizontal draw thru unit(s) complete with pre-filters, final filters, hot water heating coil, DX cooling coil and centrifugal plenum fans.
3. Variable refrigerant flow (VRF) systems: Outdoor Condensing Units with condenser coils, compressors, AC inverter. Indoor Heat Recovery Units. Indoor Fan Coil Units with evaporator coils, filters, fans.
4. Unitary Packaged Units: Horizontal draw thru unit(s) complete with pre-filters, final filters, DX cooling and heating and centrifugal fans.
5. Building Exhaust Fans:
 - a. Labs: SISW arrangement 10 centrifugal exhaust fans with BI centrifugal wheel or Class I airfoil wheel.
 - b. General: Roof mounted downblast centrifugal fans.
6. Diffusers and Return Air Grilles:
 - a. Flush with ceiling, modular, perforated type.
7. Fire/Smoke Dampers:
 - a. Damper and actuator assembly approved by UL555S testing. Actuator outside of airstream. Rated per wall rating required.





BASIS OF DESIGN MECHANICAL

F. MATERIALS:

1. Ductwork:
 - a. Ductwork will be fabricated from zinc coated sheet metal steel conforming in construction and weight to the ASHRAE and SMACNA Guide, latest Edition. All concealed indoor supply and return air ducts shall be insulated with R-4.2 minimum foil-faced fiberglass insulation. Outdoor supply and return air ducts shall be insulated with R-8 minimum foil-faced fiberglass insulation.
 - b. Distribution ductwork downstream of main ducts shall be rectangular ducts of galvanized steel or pre-fabricated spiral lock-seam ducts and fittings.
 - c. Final connection to ceiling diffusers and return air grilles in the office and common areas shall be made with a flexible duct.
2. Specialty Exhaust Ductwork:
 - a. Exhaust ductwork not exposed to high concentrations of chemicals will be constructed of galvanized steel.
 - b. Fume hood exhaust ductwork will be constructed of 304 stainless steel from fume hood to main exhaust duct.
3. Vibration Isolation:
 - a. Spring isolators will be provided internally to isolate fans in air handling units and larger DX units. Smaller DX units to be provided with vibration isolation curbs as necessary. Spring hangers to be provided for VRF fan coil units.
4. Piping:
 - a. Heating Hot Water: Type "L" Copper tube pipe and wrought copper fittings up to 2" in diameter, Schedule 40 black steel pipe and fittings above 2" in diameter.
 - b. Necessary valves and other piping accessories will be provided where required for system control.
 - c. Hot water piping will be insulated with heavy density fiberglass with vapor barrier jacket. Exposed and insulated piping will be jacketed with aluminum. Per 2016 Title 24 Code: Minimum 1" thick for heating hot water piping below 1" in diameter. Minimum 1.5" thick for heating hot water piping above 1" in diameter.





**BASIS OF DESIGN
MECHANICAL**

5. HVAC Controls (BMS):

- a. All control points from new equipment will be integrated into the BMS system via BACnet. The BMS will automatically start the systems and provide the necessary control, monitoring, alarms and trending required for energy management.

END OF SECTION

5



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BASIS OF DESIGN PLUMBING

A. GENERAL:

1. The Plumbing Systems shall be designed in accordance with the latest of listed applicable codes, standards, and authorities having jurisdiction, including, but not limited to:
 - a. 2019 California Plumbing Code
 - b. 2019 California Building Code
 - c. 2019 California Mechanical Code
 - d. 2019 California Fire Code
 - e. Fire Department Regulations
 - f. Applicable local codes and ordinances

B. SYSTEM REQUIREMENTS:

1. Domestic Cold Water (DCW): The new Domestic Cold Water (DCW) piping shall be connected to the existing 2" DCW water meter and backflow preventer outside of building near Morehouse drive. A new 3" domestic cold-water line shall be installed and routed from existing water meter to inside of building. The new 3" service shall serve the new ICW system, new core restrooms, janitors sink, and future tenant improvement spaces.
2. Domestic Hot Water (DHW) shall be provided by a new 120 CFH natural gas water heater with recirculation system. The new water heater shall be located in a new plumbing equipment room with DI skid, air compressor and vacuum pump (location TBD). The new water heater shall serve new core restroom, janitors sink sinks and future tenant improvement spaces.
3. Industrial Cold Water (ICW) shall be provided by a new 2" backflow preventer connected to the new 3" DCW system. ICW shall serve the new IHW water heater, DI skid, mechanical equipment, and future tenant improvement spaces.
4. Industrial Hot Water (IHW) shall be provided by a new 150 CFH natural gas water heater with recirculation system. The new water heater shall be located in a new plumbing equipment room with DI skid, air compressor and vacuum pump (location TBD). The new industrial water heater shall serve future tenant improvement spaces.
5. Deionized Water (DI): The DI system shall be served by a new 40 gpm RO/ DI System with a 2" loop. The DI skid shall be located in new plumbing equipment room with water heaters (2), air compressor and vacuum pump. (location TBD). The new DI system shall serve future tenant improvement spaces.



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BASIS OF DESIGN
PLUMBING

5505 Morehouse – Core & Shell
12/07/2020

6. Sanitary Waste (SW): A new SW system will be provided by connection to the existing 4" sanitary waste system by gridline A-4 and 2. The new SW system will serve the new core restrooms, janitors sinks, plumbing equipment floor sinks roof receptors and future tenant improvement spaces.
7. Industrial Waste (IW): A new 4" new IW system will connect to the existing 6" sanitary waste system outside the building with a sample port installed prior to connection. The IW system shall serve plumbing equipment floor sinks and future tenant improvement spaces.
8. Natural Gas: Natural gas shall be provided by replacing the existing 1500 cfh medium pressure gas meter with a new 4500 cfh medium pressure gas meter. The existing gas meter is located at the north west corner of the building. The new 4500 cfh mpg meter shall serve new HHW boilers and new domestic and industrial water hunters. Gas pressure regulators shall be installed as need.
9. Storm Drain (SD): (1) new roof drain will be added for the new atrium roof. And (2) existing roof drains shall be relocated for the new atrium roof otherwise the existing storm drain system supporting existing roof drains and deck drains shall remain as-is. Modifications will be made only if needed.
10. Condensate (CD): The condensate system shall connect to new M&P equipment and routed to an approved receptor.
11. Compressed Laboratory Air (CA): The CA system shall be served by a new oil free air compressor with a receiver and a desiccant air dryer (size TBD). Compressed air equipment shall be located in a new plumbing equipment room (location TBD).). CA system shall serve future tenant improvement spaces.
12. Vacuum (VAC): VAC shall be served by new Rotary Vane vacuum pumps with storage tank (size TBD). Vacuum equipment shall be located in a new plumbing equipment room (location TBD) VAC shall serve future tenant improvement spaces.
13. Nitrogen (N2): N2 shall be served by a new bulk tank located outside (location TBD.) N2 shall serve future tenant improvement spaces.
14. Specialty gas (SG): Such as Argon, and CO2 are not included at this time. However, if required in future will be piped from cylinders located within the plumbing equipment room at required lab space.





BASIS OF DESIGN
PLUMBING

5505 Morehouse – Core & Shell
12/07/2020

C. DESIGN CRITERIA:

1. Vacuum (VAC): Outlets shall be sized at approximately 21" Hg and 1 CFM per outlet. A usage (percentage) factor shall be utilized in determining pipe sizing based on the total number of outlets and connected equipment loads.
Laboratory outlets diversity factor:
 - a. 1-10 = 100%
 - b. 11-30 = 80%
 - c. 31-60 = 60%
 - d. 61-200 = 50%
2. Compressed Laboratory Air (CA): Oil-free, 100 psig stored in dry air receiver; air shall be dried to a dewpoint of -40°F and filtered through a 0.3 micron rated filter. The air shall be regulated to 90 psig and sized for 1 CFM per outlet. A usage (percentage) factor shall be utilized in determining equipment and pipe sizing based on the total number of outlets and connected equipment loads.
Laboratory outlets diversity factor:
 - a. 1-10 = 100%
 - b. 11-30 = 80%
 - c. 31-80 = 60%
 - d. 81-200 = 50%
3. Nitrogen (N2) Served by a bulk tank and vaporizer (provided by others). N2 shall be regulated to 90 psi and sized for 1 CFM per outlet. A usage (percentage) factor shall be utilized in determining pipe sizing based on the total number of outlets and connected equipment loads.
Laboratory outlets diversity factor:
 - a. 1-10 = 100%
 - b. 11-30 = 80%
 - c. 31-80 = 60%
 - d. 81-200 = 50%
4. Deionized Water (D1): The piping system shall be sized for 1 gallon per minute (GPM) of flow at each faucet and for maximum demand of each equipment item. A usage (percentage) factor shall be utilized in determining equipment and pipe sizing based on the total number of outlets and connected equipment loads. The piping system shall be drainable.
Laboratory outlets diversity factor:
 - a. 1-10 = 100%
 - b. 11-30 = 80%
 - c. 31-80 = 60%
 - d. 81-200 = 50%





BASIS OF DESIGN
PLUMBING

5505 Morehouse – Core & Shell
12/07/2020

5. Natural Gas: The piping system shall be sized per Section 12 of the 2019 CPC.
6. Domestic and Industrial Water: The piping system shall be sized for maximum velocity of 8.0 feet per second on the cold water and 5.0 feet per second on the hot water piping as per Appendix A of the 2019 CPC.
7. Sanitary and Industrial Waste/Vent: The piping system will be sized per Section 7 of the 2019 CPC.

D. MATERIALS:

1. Sanitary Waste and Vent Piping: (Above grade) No-hub cast iron pipe and fittings. (Below grade) Sch 40 PVC pipe and fittings.
2. Hot and Cold-Water Piping: Type 'L' hard-drawn copper and wrought copper fittings. Joints shall be lead-free solder or Pro-Press. All hot water supply piping shall be insulated with not less than the diameter of the pipe up to 2". larger pipe shall be 2" insulation per Section 609.11 of the 2019 CPC.
3. Condensate Drain Piping: Type 'M' copper tube and wrought copper fittings. Joints shall be lead free solder, or Pro-Press.
4. Gas Piping: Sizes 2 inches and smaller shall be Schedule 40 black steel with black malleable iron screwed fittings. Sizes 2-1/2" and larger shall be Schedule 40 black steel pipe, ASTM A120, with standard tube-turn welded fittings, or Mega-Press. All outdoor piping shall be galvanized.
5. Compressed Air: Oxygen grade, cleaned and capped type 'L' hard-drawn copper tubing and wrought copper fittings with silver brazed joints.
6. Nitrogen: Oxygen grade, cleaned and capped type 'L' hard-drawn copper tubing and wrought copper fittings with silver brazed joints.
7. Industrial Waste and Vent Piping: Single wall polypropylene piping with socket fusion welded drainage fittings. Accessible fixture P-trap shall have mechanical joint fittings.
8. Vacuum Piping: Type 'L' hard-drawn copper tubing with wrought copper fittings. Joints shall be lead free solder or Pro-Press.
9. Deionized Water Piping: Pigmented polypropylene piping with socket fusion welded fittings.





BASIS OF DESIGN
PLUMBING

5505 Morehouse – Core & Shell
12/07/2020

E. FIXTURES:

1. Water Closets. Kohler Kingston with Sloan 111 ESS hard wired flush valves
2. Urinals. Kohler Bardon K-4904-ET-0 with Sloan 186 ESS hard wired flush valves
3. Lavatory' s. Kohler Caxton under mount lavatory with Sloan Optima EAF 255 hardwired sensor faucet.
4. Floor Drains: Watts FD-100-A epoxy coated cast iron with bronze strainer.
5. Floor sinks: Watts, FS-740 porcelain enamel coated interior.
6. Mop Sink: Kohler K-6710 floor mounted with Chicago 897 CP wall mounted faucet.
7. Backflow preventer. Watts LF919QT
8. Roof Receptor: Watts RD-400

F. EQUIPMENT:

1. Air Compressor: oil-free, Open Scroll - Powerex triplex 15HP
2. Air Dryer: Twin Desiccant type air dryer (-40°F dew point). (Size TBD)
3. Air Receivers: 240 gallon
4. DI Skid: Waterworks 40 gpm. unit
5. Vacuum pump: Laboratory lubricated vane - Powerex duplex 10 HP
6. Domestic Water Heater: AO Smith BTH 120. 60 gal. 120 cfh.
7. Industrial Water Heater: AO Smith BTH 150. 100 gal. 150 cfh.

END OF SECTION





1.1 5505 Morehouse Drive

1.1.1 Electrical Systems Description

A. Electrical Distribution

1. Normal Utility Power/ Main Building Switchgear

- a. New 3000A 480Y/277V 3 phase 4 wire service. See Load Summary Allowance below.
- b. Provisions for future tenant separate Electrical distribution.
- c. Complete short circuit, coordination and Arc Flash report for switchgear.

2. Emergency/Standby Power

- a. New 500kw emergency power system consisting of a diesel fueled emergency generator, automatic transfer switch, and dedicated emergency power distribution panels.
- b. The following systems and equipment shall be supplied with emergency/standby power based upon Code requirements:
 - Emergency and exit lighting (if not supplied with internal batteries)
 - Ventilation systems serving core atrium areas.
 - Fire/smoke dampers
 - Fire Alarm system
 - Smoke Evac System
 - Emergency Lighting systems
- c. The following processes and equipment should be provided with emergency/standby power:
 - Building Management System (BMS)
 - Lab equipment and support HVAC equipment
 - Required exhaust system equipment

3. Uninterruptible Power Systems (UPS)

- a. Building electrical systems are capable of UPS integration if required by tenant or landlord.

4. Distribution Equipment –

- a. Panelboards
 - Panelboards for lighting and mechanical: 480Y/277V 3φ 4W or 208Y/120V 3φ 4W, located in electrical equipment rooms or flush in new walls. All new panelboards rated for calculated fault current ratings.
 - All panelboards furnished with bolt-on circuit breakers, 42-pole space, bus ratings (as indicated on the panel schedules), copper bussing, and shall be either surface or flush mounted (as indicated on plans).
 - Panelboards provided with a copper ground bus. All 208Y/120V 3φ 4W panelboards are provided with 200% rated neutral bus.
- b. Feeders
 - Feeders: copper conductors (Type THHN or THWN) routed in electrometallic tubing (EMT), polyvinylchloride (PVC) conduit, or rigid galvanized steel (RGS) conduit. EMT used in all indoor, concealed locations where the feeder is protected from damage or weather. RGS conduit is used in exterior applications or where the conduit may be exposed to physical damage. PVC used for all below-grade applications.

- Feeders sized according to the singleline diagram in the construction documents.
 - Feeders rack-mounted in accessible ceiling spaces or routed below grade under the slab.
5. Branch Circuitry –
- a. Conduit and Wire
- Branch circuits for all lighting, power circuits serving convenience outlets, control power, etc. furnished as 120V 20A circuits.
 - Branch circuit increase in size for specific loads or as necessary to prevent excessive voltage drop on longer circuits.
 - MC cable provided as needed for concealed wall wiring, and other approved locations.
6. Electrical Devices
- a. Electrical devices including (receptacles and switches) are rated according to their load served.
- b. Electrical devices provided as white in color with white thermoplastic cover plates.
- c. Cover plates for receptacles and junction boxes are labeled indicating the circuit and panelboard from which the device is fed.
7. Lighting Systems –
- a. Fixtures are suitable for the application including the ability to provide egress illumination where required and shown on plans.
- b. Fixtures meet U.L. requirements and selection and placement of fixtures shall comply with ADA requirements.
- c. All lighting fixtures operate at 277V or 120V unless specifically noted otherwise.
- d. Fixture lamping and quantities comply with the Title 24 energy budget.
- Fixtures are LED type to extend lamp life and reduce wattage
- e. Dimming ballasts provided for all new fixtures unless specified otherwise.
- f. Photocell control provided for all Title 24 required areas.
- g. Motion sensors provided for all lab, office, storage and support areas.
- h. Lighting design based on meeting the LEED requirements of the project.
8. Lighting Control Systems –
- a. Lighting control complies with Title 24 requirements (including over-ride control for automatically shutting the lights off at prescribed periods of time and the ability to over-ride the lighting control for up to two hours of use).

- b. Lighting control equipment includes a programmable lighting control panel, relay panels (quantity as necessary), over-ride switches (distributed throughout the space), and interconnecting conductors. Control panel is provided with required hardware and software for interface with mechanical energy management systems.
 - c. Each area is controlled by multi-level switching or dimming for local control. This design selection was chosen based on meeting the California State 2020 Title 24 requirements as well as giving a better automatic control reducing overall energy usage.
- 9. Mechanical System Connections
 - a. Power supplied from the 480Y/277V or 208/120V system for line voltage to mechanical equipment.
 - b. Control power wiring regardless of voltage provided by the mechanical contractor.
 - c. Smoke control systems provided and installed by mechanical.
 - d. Motor starters and disconnect switches provided by the electrical contractor according to the control wiring diagrams provided by the mechanical contractor.
- 10. Telephone/Data Systems
 - a. Telephone, security and data system 120V power connections at locations required.
 - b. Conduit riser system as required for interconnection between floors.
 - c. Cabling system design, system hardware, system cable and installation of signal system is not part of the electrical contract.
 - d. Conduit sleeves provided between floors as required.
- 11. Security Systems
 - a. Furnished required conduit, junction boxes and power sources for security devices.
- 12. Grounding

Electrical grounding provided as follows:

 - a. Electrical code required systems and equipment grounding.
 - b. Ground bus at telephone and data rooms
 - c. Ground bus at laboratory and manufacturing areas where solvent use is identified for code required vessel grounding and bonding.



13. Emergency Transfer Switch

- a. Automatic Transfer switches at 480V are Bypass Isolation types.

1.2 Electrical Systems Design Criteria

1.2.1 Codes, Guidelines and Standards

Electrical systems and equipment designed to comply with the Codes, Guidelines, and Standards identified in NFPA 70, NFPA 70E and NFPA 110.

1.2.2 Power Systems

In general, electrical outlets supplying power to all core and shell supporting equipment, appliances, mechanical equipment, etc.

A. Building Support

1. One (1) duplex receptacle within 25 feet of all mechanical equipment for servicing and maintenance.
2. At least one (1) duplex receptacle installed in each occupied space.

B. MDF/IDF Room(s)

1. One 120V, 20A general-purpose receptacles supplied from the building's normal distribution system.

C. Restrooms

1. At least one (1) duplex receptacle will be installed in each restroom. Typically, receptacles will be located above the vanity and will be of the GFCI type.

D. Storage Rooms

1. At least one (1) duplex receptacle installed.

E. Testing

1. Contractor provided electrical GFI testing, breaker testing and cable Meggar testing for entire electrical system. Breaker testing done on all circuit breakers 400A and above.

F. Coordination Study and Arc Flash Study

1. Contractor has engaged an engineer to perform a complete coordination study and Arc Flash report with labeling for entire building electrical systems.





LOAD SUMMARY ALLOWANCE

<u>Main Utility Power</u>	3000A 480Y/277V 3PH	
	4W	
	<u>VA LOAD</u>	<u>AMP LOAD</u>
75,000 Squire Feet	2000000	2406.7
		0.0
		0.0
		0.0
TOTAL	2000000	2406.7
		AMPS

Building Overall		
75000	SqFt / VA Load =	26.7 W/SFFT

LOAD SUMMARY ALLOWANCE Lab Area Only

<u>Generator Power 500KW</u>	1000A 480Y/277V 3PH	
	4W	
	<u>VA LOAD</u>	<u>AMP LOAD</u>
		0.0
Smoke Evac	187000	225
Emergency Lighting	50000	60.2
Tenant E power	375000	451.3
TOTAL	612000	736.5
		AMPS

GENERATOR Overall		
70000	SqFt / VA Load =	5.35 W/SFFT



Schedule 5

Project Responsibility Matrix

DESCRIPTION	ALLOCATION		
	Provided by Landlord as part of Core & Shell	Provided by Landlord as part of the Tenant Improvement Fund	Provided by Tenant at Tenant Cost
GENERAL			
Parking spaces provided (108)	X		
Permits & Fees			
Building Core & Shell Permit & Fees	X		
All Tenant Improvement Permits & Fees		X	
SITEWORK			
Designated Loading Area	X		
Trash Enclosure (in Garage)	X		
New Generator Enclosure	X		
Central Plant/Service Yard Equipment and Enclosure	X		
Existing Sanitary Sewer Connection (6")	X		
Existing Storm Drain Connections	X		
Existing SDG&E Service	X		
Existing Domestic Water Service (3") & Backflow Preventer	X		
Existing Fire Water Service (4")	X		
Exterior Nitrogen (N2) Bulk Tank (1500 gallons) including Exterior Enclosure with concrete pad and screening element. Also includes Type K Copper Piping extending underground from N2 Enclosure to riser located in building. Includes N2 riser within building.	X		
Monument Signage for Tenant		X	
Site FF&E (No site FF&E currently proposed, Tenant cannot use TIA for this item)			X
LANDSCAPING			
New ADA Pathway from right-of-way to building entry	X		
Existing Landscaping	X		
Existing Hardscape	X		
STRUCTURE			
Existing steel frame structure over pre-cast columns and double-tees	X		
New MEP Equipment Pads and Supplemental Support for Warm Up	X		
New MEP Equipment Pads and Supplemental Support for redundant supply and redundant exhaust fans for Tenant Improvement		X	
Existing Shaft Opening to remain or be infilled as needed	X		
New Shaft Openings for Warm Shell Infrastructure	X		
New Shaft Openings for Tenant Infrastructure		X	
Egress Stairs as required by code	X		
ROOFING			
Class 'A' roofing system and insulation	X		
Existing Roof Penetrations	X		
New Roof Penetrations for Warm Shell Equipment	X		
New Roof Penetrations for Tenant Equipment		X	
EXTERIOR			
New water-tight base building exterior skin system	X		
Base Building Entrances	X		
Building mounted Tenant signage in accordance with City of San Diego rules and regulations		X	
Roof screen designed to obscure Warm Shell rooftop equipment.	X		
COMMON AREAS			

New enclosed atrium/lobby, including interior finishes	X	
L1-L3 Feature Stair & Bridge, including: Permanent Guardrails, permanent seismic joint covers, Flooring, Ceilings/Sottits/Vertical Fabrications, Partitions, and Lighting	X	
New Restrooms & Janitor's Closets, including Partitions, Finishes, Mechanical and Electrical Systems, Equipment, Fixtures.	X	
Base building finishes in Elevator Machine Room(s)	X	
West Egress stairway with new finishes to be determined by landlord	X	
Code required signage for all base building rooms (Elevator Machine Room(s) and MPOE/Main Electrical Room).	X	
Main Electrical Room and MPOE rooms.	X	
Common Electrical, IDF, Tele Data Rooms	X	
Elevators with standard finishes (Qty (2) 4-stop hydraulic elevators by Otis)	X	
New 4-stop, 5,000lb Capacity service elevator	X	
HazMat Storage Shed		X
WINDOW TREATMENT		
Interior Window Treatments		X
Manual Mechoshades		X
Blocking, Perimeter Soffit/Window Treatment Support		X



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TENANT AREAS

Building interiors delivered in shell condition	X		
Drywall at inside face of exterior walls		X	
Finishes at inside face of exterior walls		X	
L1-L2 Interior Glazing/Walls and Doors at Huddle Room inside Atrium.	X		
Perimeter soffits at exterior walls.		X	
Finishes at inside face at Tenant side of core partitions		X	
Electrical closets within Tenant Premises		X	
Tenant Tele/data/IDF rooms		X	
Tenant break or kitchen areas		X	
Partitions, ceilings, flooring, painting, finishes, doors, frames, hardware, millwork, casework, and buildout.		X	
Wire shelving & chemical racking systems			X
All casework in tenant areas		X	
Fixtures, Furniture, Equipment (FF&E)			X
Lab equipment, including but not limited to: biosafety cabinets, freezers/refrigerators, storage racks, incubators, etc.			X
(2) 8' fume hoods, small autoclave/point-of-use boiler, and (2x) under counter glass-wash units with DI rinse		X	
(2) Dishwashers, (4) refrigerators, garbage disposals, and hands-free faucets at sinks that will remain with the property		X	
Audio Visual Equipment, low-voltage cabling, and associated supports			X
All interior code required signage for Tenant Premises		X	
All wayfinding signage and tenant specific signage for branding purposes (except the building signage and monument signage)			X

FIRE PROTECTION

Existing Fire Protection System, in shell condition	X		
Modification of sprinkler branch and main piping and head locations to suit Tenant layout & hazard index		X	
Specialized extinguishing systems			X
Fire extinguishers and cabinets at Tenant Premises		X	
Painting of any fire sprinkler piping in tenant premises		X	

PLUMBING

Existing Building Sanitary Waste and Vent System	X		
Existing Domestic Water System	X		
Domestic Water Heater	X		
Industrial Water Heater	X		
Existing Roof Drainage System	X		
Plumbing risers, fixtures, piping for new restrooms & janitor closets	X		
Plumbing distribution within tenant spaces		X	
House systems for tenant's shared use: RODI water, compressed dry air, lab vacuum, N2	X		

NATURAL GAS

Existing Natural Gas Service	X		

HEATING, VENTILATION, AIR CONDITIONING

Existing Mechanical Equipment to be reused includes one (160-ton chiller manufactured by Carrier in 2018) and two B&G CHW pumps at 7.5 hp each. All other existing mechanical equipment to be removed. This Mechanical Equipment will supply L1/L2 Tenant Improvements.	X		
Mechanical Equipment required for Interior Warm Up of Atrium and Restrooms. Includes but not limited to: AHU's, Boilers, Pumps, Make-up Fans, Automation/Controls and associated piping, support.	X		
Mechanical Equipment required for Warm Up of Level 1 & 2 Tenant Premises. Includes but not limited to : AHU's with no humidification control, Boilers, Pumps, Make-up Fans, Automation/Controls and associated piping, support	X		
Supplemental mechanical equipment includes but not limited to: Redundant Exhaust fan, Redundant Supply Fan, Controls, associated piping, support.		X	
Atrium Smoke Evacuation System including (2) New Rooftop 50K CFM Exhaust Fans, Gravity Ventilator System, Louvered Intake, Linear Bar Grilles and related shaft, ductwork and controls.	X		
Air handling units for the atrium providing 100% outside air.	X		
Air Distributeion in Tenant Premises		X	
Air Distributeion in Atrium	X		
Hydronic Piping Distributeion in Tenant Premises		X	
Hydronic Piping Distributeion in Atrium	X		

ELECTRICAL

New Electrical Service (3000 A, 277/480 V, 3-ph, 4-wire)

X



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Power Distribution within Tenant Premises		X	
Emergency Power Generator providing shared capacity. Minimum 4 W/sf to be available for tenant's use.	X		
Lighting in MPOE, EMR, and Main Electrical Room.	X		
Lighting in tenant areas.		X	
FIRE ALARM			
Base Expandable Fire Alarm System at Elevators, Garage, Core Areas.	X		
Fire Alarm System, subpanels and Devices for Tenant Premises with integration into Base Building System.		X	
TELEPHONE/DATA			
Existing Pathways to MPOE	X		
Fiber Optic Service			X
Low-voltage cabling, Security, A/V			X
Provisioning of circuits and service from service providers.			X
SECURITY			
Card access at main east and west entries at L1 and L2 (total 4 locations).	X		
Tenant Security Systems			X



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EXHIBIT C-2 TO LEASE

SUBSEQUENT PREMISES WORK LETTER

THIS SUBSEQUENT PREMISES WORK LETTER dated June 16, 2021 (this “**Subsequent Premises Work Letter**”) is made and entered into by and between **ARE-SD REGION NO. 66, LLC**, a Delaware limited liability company (“**Landlord**”), and **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation, and is attached to and made a part of the Lease Agreement dated June 16, 2021 (the “**Lease**”), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

1. General Requirements.

(a) **Tenant’s Authorized Representative.** Tenant designates Peter Flynn and Michael Faerm (either such individual acting alone, “**Tenant’s Representative**”) as the only persons authorized to act for Tenant pursuant to this Subsequent Premises Work Letter. Landlord shall not be obligated to respond to or act upon any request, approval, inquiry or other communication (“**Communication**”) from or on behalf of Tenant in connection with this Subsequent Premises Work Letter unless such Communication is in writing from Tenant’s Representative. Tenant may change either Tenant’s Representative at any time upon not less than 5 business days advance written notice to Landlord. Neither Tenant nor Tenant’s Representative shall be authorized to direct Landlord’s contractors in the performance of Landlord’s Work (as hereinafter defined).

(b) **Landlord’s Authorized Representative.** Landlord designates Alex Wehrmann and Michael Barbera (either such individual acting alone, “**Landlord’s Representative**”) as the only persons authorized to act for Landlord pursuant to this Subsequent Premises Work Letter. Tenant shall not be obligated to respond to or act upon any request, approval, inquiry or other Communication from or on behalf of Landlord in connection with this Subsequent Premises Work Letter unless such Communication is in writing from Landlord’s Representative. Landlord may change either Landlord’s Representative at any time upon not less than 5 business days advance written notice to Tenant. Landlord’s Representative shall be the sole persons authorized to direct Landlord’s contractors in the performance of Landlord’s Work.

(c) **Architects, Consultants and Contractors.** Landlord and Tenant hereby acknowledge and agree that, provided that their fees are at current market rates for comparable life science projects: (i) DPR shall be the general contractor for the Subsequent Premises Tenant Improvements (the “**General Contractor**”), (ii) McFarlane Architects shall be the architect (the “**TI Architect**”) for the Subsequent Premises Tenant Improvements, for the Subsequent Premises Tenant Improvements, and (iii) any subcontractors for the Subsequent Premises Tenant Improvements shall be selected by Landlord pursuant to a competitive process, subject to Tenant’s approval, which approval shall not be unreasonably withheld, conditioned or delayed.

2. Subsequent Premises Tenant Improvements.

(a) **Subsequent Premises Tenant Improvements Defined.** As used herein, “**Subsequent Premises Tenant Improvements**” shall mean all improvements to the Subsequent Premises of a fixed and permanent nature as shown on the TI Construction Drawings, as defined in Section 2(c) below.

(b) **Tenant’s Space Plans.** The plan prepared by the TI Architect attached hereto as **Schedule 1** (the “**Space Plans**”) and the tenant improvement specifications for the Subsequent Premises Tenant Improvements attached hereto as **Schedule 2** (the “**TI Specifications**”) have been approved by both Landlord and Tenant. Landlord and Tenant further acknowledge and agree that any changes to the Space Plans or the TI Specifications requested by Tenant constitute a Change Request the cost of which changes shall be paid for out of the TI Fund (as defined in Section 5(d)). Tenant shall be solely responsible for all costs incurred by Landlord to alter the Building as a result of Tenant’s requested Changes (which shall be subject to the terms of Section 4 hereof).



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(c) **Working Drawings.** Landlord shall cause the TI Architect to prepare and deliver to Tenant for review and comment construction plans, specifications and drawings for the Subsequent Premises Tenant Improvements (“**TI Construction Drawings**”), which TI Construction Drawings shall be prepared substantially in accordance with the Space Plans and the TI Specifications. Tenant shall be solely responsible for ensuring that the TI Construction Drawings reflect Tenant’s requirements for the Subsequent Premises Tenant Improvements. Tenant shall deliver its written comments on the TI Construction Drawings to Landlord not later than 10 days after Tenant’s receipt of the same; provided, however, that Tenant may not disapprove any matter that is consistent with the Space Plans and TI Specifications without submitting a Change Request. Landlord and the TI Architect shall consider all such comments in good faith and shall, within 10 days after receipt, notify Tenant how Landlord proposes to respond to such comments, but Tenant’s review rights pursuant to the foregoing sentence shall not delay the design or construction schedule for the Subsequent Premises Tenant Improvements. Any disputes in connection with such comments shall be resolved in accordance with Section 2(d) hereof. Provided that the design reflected in the TI Construction Drawings is consistent with the Space Plans and TI Specifications, Tenant shall approve the TI Construction Drawings submitted by Landlord, unless Tenant submits a Change Request. Once approved by Tenant, subject to the provisions of Section 4 below, Landlord shall not materially modify the TI Construction Drawings except as may be reasonably required in connection with the issuance of the TI Permit (as defined in Section 3(b), below).

(d) **Approval and Completion.** Both a schedule of critical dates (“**Subsequent Premises Critical Dates Schedule**”) and a more detailed schedule for the Subsequent Premises Tenant Improvements are attached hereto as **Schedule 3**. It is hereby acknowledged by Landlord and Tenant that the schematic design of the Subsequent Premises Tenant Improvements, the design development for the Subsequent Premises Tenant Improvements and the completion of the permit set of plans for Landlord’s Work must be completed by the dates set forth in Subsequent Premises Critical Dates Schedule, in order for the Subsequent Premises Tenant Improvements to be Substantially Complete by the Subsequent Premises Target Commencement Date (as defined in the Lease). Upon any dispute regarding the design of the Subsequent Premises Tenant Improvements, which is not settled within 10 business days after notice of such dispute is delivered by one party to the other, Tenant may make the final decision regarding the design of the Subsequent Premises Tenant Improvements, provided (i) Tenant acts reasonably and such final decision is either consistent with or a compromise between Landlord’s and Tenant’s positions with respect to such dispute, (ii) all costs and expenses resulting from any such decision by Tenant shall be payable out of the TI Fund, and (iii) Tenant’s decision will not affect the base Building, structural components of the Building or any Building Systems (in which case Landlord shall make the final decision). Any changes to the TI Construction Drawings following Landlord’s and Tenant’s approval of same requested by Tenant shall be processed as provided in Section 4 hereof.

3. Performance of Landlord’s Work.

(a) **Definition of Landlord’s Work.** As used herein, “**Landlord’s Work**” shall mean the work of constructing the Subsequent Premises Tenant Improvements.

The reference in the Responsibility Matrix to (x) “Provided by Landlord as part of the Tenant Improvement Fund” refers to the Subsequent Premises Tenant Improvements that will be paid out of the TI Fund, and (z) “Provided by Tenant at Tenant’s Cost” refers to the Subsequent Premises Tenant Improvements be paid for out-of-pocket by Tenant.

Tenant shall be solely responsible for ensuring that the design and specifications for Landlord’s Work are consistent with Tenant’s requirements. Landlord shall be responsible for obtaining all permits, approvals and entitlements necessary for Landlord’s Work, but shall have no obligation to, and shall not, secure any permits, approvals or entitlements related to Tenant’s specific use of the Subsequent Premises or Tenant’s business operations therein. This includes securing county approval of San Diego Regional Hazardous Material Questionnaire which Tenant shall be required to obtain.



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During the construction of Landlord's Work, Landlord shall maintain builder's risk insurance coverage in commercially reasonable amounts and the General Contractor shall maintain subcontractor default insurance and general liability insurance in commercially reasonable amounts.

(b) **Commencement and Permitting.** Landlord shall commence construction of the Subsequent Premises Tenant Improvements upon obtaining a building permit (the "**TI Permit**") authorizing the construction of the Subsequent Premises Tenant Improvements consistent with the TI Construction Drawings approved by Tenant. Landlord shall diligently pursue all approvals, permits and entitlements necessary to construction the Subsequent Premises Tenant Improvements. The cost of obtaining the TI Permit shall be payable from the TI Fund. Tenant shall reasonably cooperate with Landlord in obtaining the TI Permit. If any Governmental Authority having jurisdiction over the construction of Landlord's Work or any portion thereof shall impose terms or conditions upon the construction thereof that: (i) are inconsistent with Landlord's obligations hereunder, (ii) increase the cost of constructing Landlord's Work, or (iii) will materially delay the construction of Landlord's Work, Landlord and Tenant shall reasonably and in good faith seek means by which to mitigate or eliminate any such adverse terms and conditions.

(c) **Completion of Landlord's Work.** Landlord shall substantially complete or cause to be substantially completed Landlord's Work in a good and workmanlike manner, in accordance with the TI Permit subject, in each case, to Minor Variations and normal "punch list" items of a non-material nature that do not interfere with Tenant's access to the Subsequent Premises or the use of the Subsequent Premises and with a certificate or temporary certificate of occupancy (or an equivalent approval having been issued) for the Subsequent Premises permitting lawful occupancy of the Subsequent Premises (but specifically excluding any permits, licenses or other governmental approvals required to be obtained in connection with Tenant's operations in the Subsequent Premises) ("**Substantial Completion**" or "**Substantially Complete**"). Upon Substantial Completion of Landlord's Work, Landlord shall require the TI Architect and the General Contractor to execute and deliver, for the benefit of Tenant and Landlord, a Certificate of Substantial Completion in the form of the American Institute of Architects ("**AIA**") document G704. For purposes of this Subsequent Premises Work Letter, "**Minor Variations**" shall mean any non-material modifications reasonably required: (i) to comply with all applicable Legal Requirements and/or to obtain or to comply with any required permit (including the TI Permit); (ii) to comply with any request by Tenant for modifications to the Subsequent Premises Tenant Improvements; (iii) to comport with good design, engineering, and construction practices that are not material; or (iv) to make reasonable adjustments for field deviations or conditions encountered during the construction of the Subsequent Premises Tenant Improvements.

(d) **Selection of Materials.** Where more than one type of material or structure is indicated on the TI Construction Drawings approved by Landlord and Tenant, the option will be selected at Landlord's reasonable discretion. As to all building materials and equipment that Landlord is obligated to supply under this Subsequent Premises Work Letter, Landlord shall select the manufacturer thereof in its reasonable discretion.

(e) **Delivery of the Subsequent Premises.** When Landlord's Work (as defined in Section 3(a)) is Substantially Complete, subject to the remaining terms and provisions of this Section 3(e), Tenant shall accept the Subsequent Premises. Tenant's taking possession and acceptance of the Subsequent Premises shall not constitute a waiver of: (i) any warranty with respect to workmanship (including installation of equipment) or material (exclusive of equipment provided directly by manufacturers) with respect to the Subsequent Premises, (ii) any non-compliance of Landlord's Work, or (iii) any claim that Landlord's Work in the Subsequent Premises was not completed substantially in accordance with the TI Construction Drawings (subject to Minor Variations and such other changes as are permitted hereunder) (collectively, a "**Construction Defect**"). Tenant shall have one year after Substantial Completion within which to notify Landlord of any such Construction Defect discovered by Tenant in the Subsequent Premises, and Landlord shall use reasonable efforts to remedy or cause the responsible contractor to remedy any such Construction Defect within 30 days thereafter. Notwithstanding the foregoing, Landlord shall not be in default under the Lease if the applicable contractor, despite Landlord's reasonable efforts, fails to remedy such Construction Defect within such 30-day period. If the contractor fails to remedy such Construction Defect within a reasonable time, Landlord shall use its reasonable efforts to remedy the Construction Defect within a reasonable period.



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Tenant shall be entitled to receive the benefit of all construction warranties and manufacturer's equipment warranties relating to equipment installed in the Premises. If requested by Tenant, Landlord shall attempt to obtain extended warranties from manufacturers and suppliers of such equipment, but the cost of any such extended warranties shall be paid for out of the TI Fund. Landlord shall promptly undertake and complete, or cause to be completed, all punch list items.

(f) **Subsequent Premises Commencement Date Delay.** Except as otherwise set forth in the Lease, Delivery of the Subsequent Premises shall occur when Landlord's Work has been Substantially Completed, except to the extent that completion of Landlord's Work shall have been actually delayed by any one or more of the following causes ("**Tenant Delay**"):

- (i) Tenant's Representative was not available within 1 business day to give or receive any Communication or to take any other action required to be taken by Tenant hereunder;
- (ii) Tenant's request for Change Requests (as defined in Section 4(a) below) whether or not any such Change Requests are actually performed;
- (iii) Construction of any Change Requests;
- (iv) Tenant's request for materials, finishes or installations requiring unusually long lead times provided that Landlord shall endeavor to advise Tenant whether any items require unusually long lead times;
- (v) Tenant's delay in reviewing, revising or approving plans and specifications beyond the periods set forth herein;
- (vi) Tenant's delay in providing information critical to the normal progression of the Project. Tenant shall provide such information as soon as reasonably possible, but in no event longer than one week after receipt of any request for such information from Landlord;
- (vii) Tenant's delay in making payments to Landlord for Excess TI Costs (as defined in Section 5(d) below); or
- (viii) Any other act or omission by Tenant or any Tenant Party (as defined in the Lease), or persons employed by any of such persons which continues for more than 1 business day after Landlord's notice thereof to Tenant.

If Delivery is delayed for any of the foregoing reasons, then Landlord shall cause the TI Architect to certify the date on which the Subsequent Premises Tenant Improvements would have been Substantially Completed but for such Tenant Delay and such certified date shall be the date of Delivery.

4. **Changes.** Any changes requested by Tenant to the Subsequent Premises Tenant Improvements shall be requested and instituted in accordance with the provisions of this Section 4 and shall be subject to the written approval of Landlord and the TI Architect, such approval not to be unreasonably withheld, conditioned or delayed.

(a) **Tenant's Request For Changes.** If Tenant shall request changes to the Subsequent Premises Tenant Improvements ("**Changes**"), Tenant shall request such Changes by notifying Landlord in writing in substantially the same form as the AIA standard change order form (a "**Change Request**"), which Change Request shall detail the nature and extent of any such Change. Such Change Request must be signed by Tenant's Representative. Landlord shall, before proceeding with any Change, use commercially reasonable efforts to respond to Tenant as soon as is reasonably possible with an estimate of: (i) the time



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it will take, and (ii) the architectural and engineering fees and costs that will be incurred, to analyze such Change Request (which costs shall be paid from the TI Fund to the extent actually incurred, whether or not such change is implemented). Landlord shall thereafter submit to Tenant in writing, within 5 business days of receipt of the Change Request (or such longer period of time as is reasonably required depending on the extent of the Change Request), an analysis of the additional cost or savings involved, including, without limitation, architectural and engineering costs and the period of time, if any, that the Change will extend the date on which Landlord's Work will be Substantially Complete. Any such delay in the completion of Landlord's Work caused by a Change, including any suspension of Landlord's Work while any such Change is being evaluated and/or designed, shall be Tenant Delay.

(b) **Implementation of Changes.** If Tenant approves in writing the cost or savings and the estimated extension in the time for completion of Landlord's Work, if any, Landlord shall cause the approved Change to be instituted. Notwithstanding any approval or disapproval by Tenant of any estimate of the delay caused by such proposed Change, the TI Architect's determination of the amount of Tenant Delay in connection with such Change shall be final and binding on Landlord and Tenant.

5. Costs.

(a) **Budget For Subsequent Premises Tenant Improvements.** Before the commencement of construction of the Subsequent Premises Tenant Improvements, Landlord shall obtain a detailed breakdown by trade of the costs incurred or that will be incurred in connection with the design and construction of the Subsequent Premises Tenant Improvements (as the same may be amended, the "**Budget**"). The Budget shall be based upon the TI Construction Drawings approved by Tenant and shall include a payment to Landlord of administrative rent ("**Administrative Rent**") equal to 3% of "hard" TI Costs for monitoring and inspecting the construction of the Subsequent Premises Tenant Improvements and Changes, which sum shall be payable from the TI Fund (as defined in Section 5(d)). Landlord shall make its records with respect to the Subsequent Premises Tenant Improvements, including invoices from Landlord's contractors that shall be paid from the TI Allowance, monthly project cash flow projections, and monthly budget reconciliations, available to Tenant on an "open book" basis throughout the design and construction of the Subsequent Premises Tenant Improvements.

(b) **TI Allowance.** Landlord shall provide to Tenant a tenant improvement allowance (the "**TI Allowance**") of \$239.00 per rentable square foot of the Subsequent Premises.

The TI Allowance shall be disbursed in accordance with this Subsequent Premises Work Letter. Tenant shall have no right to the use or benefit (including any reduction to or payment of Base Rent) of any portion of the TI Allowance not required for the construction of (i) the Subsequent Premises Tenant Improvements described in the TI Construction Drawings approved pursuant to Section 2(d) or (ii) any Changes pursuant to Section 4.

In addition to the TI Allowance, Landlord shall provide Tenant with one test fit for the Subsequent Premises prepared by McFarlane Architects, the Landlord's Project architect, but in no event shall Landlord be required to pay any costs in excess of \$0.15 per rentable square foot of the Subsequent Premises for such test fit.

(c) **Costs Includable in TI Fund.** The TI Fund shall be used solely for the payment of design, permits and construction costs in connection with the construction of the Subsequent Premises Tenant Improvements, including, without limitation, the cost of electrical power and other utilities used in connection with the construction of the Subsequent Premises Tenant Improvements, the cost of preparing the Space Plan and the TI Construction Drawings, all costs set forth in the Budget, including Landlord's Administrative Rent, Landlord's out-of-pocket expenses, costs resulting from Tenant Delays, the cost of Changes and a project management fee of up to 1% of the "hard" TI Costs to a third party project manager selected by Tenant and reasonably approved by Landlord (collectively, "**TI Costs**"). Notwithstanding anything to the contrary contained herein, the TI Fund shall not be used to purchase any furniture, personal property or other non-Building system materials or equipment, including, but not limited to, AV equipment, racks for



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switches or wall with backboard for mounting equipment, CAT6 cabling or any other tele-data cabling or infrastructure required for the availability of wifi service within the Premises, non-ducted biological safety cabinets and other scientific equipment not incorporated into the Subsequent Premises Tenant Improvements.

(d) **Excess TI Costs.** Landlord shall have no obligation to bear any portion of the cost of any of the Subsequent Premises Tenant Improvements except to the extent of the TI Allowance. If at any time and from time-to-time, the remaining TI Costs under the Budget exceed the remaining unexpended TI Allowance (“**Excess TI Costs**”), the monthly disbursements of the TI Allowance shall be made in the proportion that the remaining TI Allowance bears to the outstanding TI Costs under the Budget, and Tenant shall fund the balance of each such monthly draw. For purposes of any litigation instituted with regard to such amounts, those amounts required to be paid by Tenant will be deemed Rent under the Lease. The TI Allowance and Excess TI Costs are herein referred to as the “**TI Fund**.” Notwithstanding anything to the contrary set forth in this Section 5(d), Tenant shall be fully and solely liable for TI Costs and the cost of Minor Variations in excess of the TI Allowance.

6. Tenant Access.

(a) **Tenant’s Access Rights.** Landlord hereby agrees to permit Tenant access, at Tenant’s sole risk and expense, to the Subsequent Premises (i) 30 days prior to the Commencement Date to perform any work (“**Tenant’s Work**”) required by Tenant other than Landlord’s Work, provided that such Tenant’s Work is coordinated with the TI Architect and the General Contractor, and complies with the Lease and all other reasonable restrictions and conditions Landlord may impose, and (ii) prior to the completion of Landlord’s Work, to inspect and observe work in process; all such access shall be during normal business hours or at such other times as are reasonably designated by Landlord. Any entry by Tenant shall comply with all established safety practices of Landlord’s contractor and Landlord until completion of Landlord’s Work and acceptance thereof by Tenant.

(b) **No Interference.** Neither Tenant nor any Tenant Party (as defined in the Lease) shall interfere with the performance of Landlord’s Work, nor with any inspections or issuance of final approvals by applicable Governmental Authorities, and upon any such interference, Landlord shall have the right to exclude Tenant and any Tenant Party from the Subsequent Premises until Substantial Completion of Landlord’s Work.

(c) **No Acceptance of Premises.** The fact that Tenant may, with Landlord’s consent, enter into the Subsequent Premises prior to the date Landlord’s Work is Substantially Complete for the purpose of performing Tenant’s Work shall not be deemed an acceptance by Tenant of possession of the Subsequent Premises, but in such event Tenant shall defend with counsel reasonably acceptable by Landlord, indemnify and hold Landlord harmless from and against any loss of or damage to Tenant’s property, completed work, fixtures, equipment, materials or merchandise, and from liability for death of, or injury to, any person, caused by the act or omission of Tenant or any Tenant Party.

7. Miscellaneous.

(a) **Consents.** Whenever consent or approval of either party is required under this Subsequent Premises Work Letter, that party shall not unreasonably withhold, condition or delay such consent or approval, unless expressly set forth herein to the contrary.

(b) **Modification.** No modification, waiver or amendment of this Subsequent Premises Work Letter or of any of its conditions or provisions shall be binding upon Landlord or Tenant unless in writing signed by Landlord and Tenant.

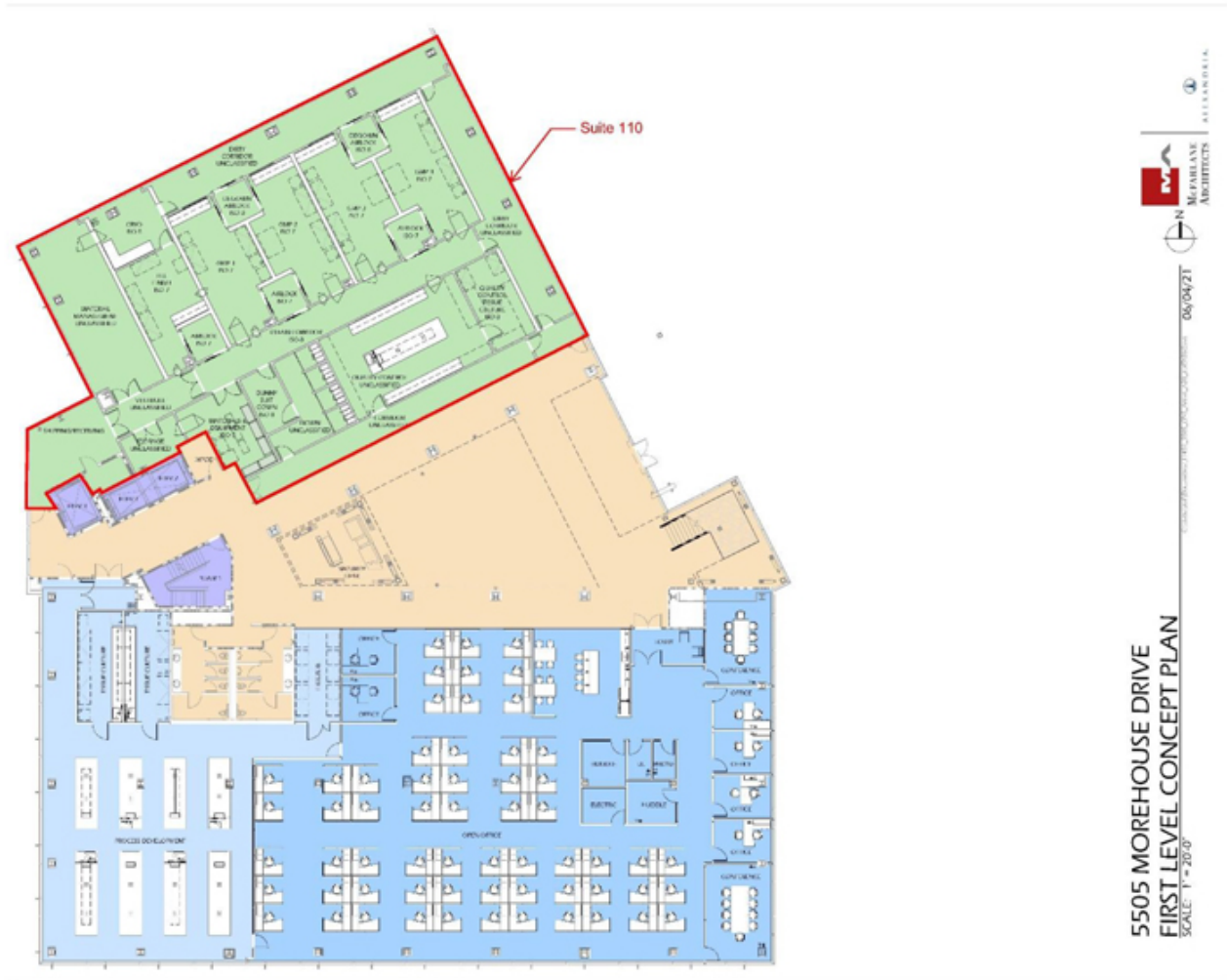
(c) **No Default Funding.** In no event shall Landlord have any obligation to fund any portion of the TI Allowance or to perform any Landlord’s Work during any period that Tenant is in Default under the Lease.



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Schedule 1

Space Plans



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Schedule 2

TI Specifications

ARTIVA BIOTHERAPEUTICS BASIS OF DESIGN
5505 MOREHOUSE DRIVE, SAN DIEGO, CALIFORNIA

2.0 Architectural Artiva Biotherapeutics Basis of Design

2.1 Building Description	General Description Year Building Shell Construed: 1985 Governing Building Code: 1982 UBC Number of Stories above Grade: 3 Number of Stories below Grade: 1 (parking) Type of Construction per California Building Code : Type II-B Type of Occupancies per California Building Code: B, S-2 Occupancy Separations: 2-HR(B-1 st , 1 st -2 nd , 2 nd -3 rd) Hazardous Material Control Areas: See Section 2.2 and Exhibit 1 Fire Sprinklers: Yes Structural Frame: Steel, 2-HR (except the roof Exterior Walls: Curtainwall; Non-rated Floor Construction: Concrete Fill, Steel Pan, 2-HR Roof Construction: Concrete Fill, Steel Pan, Non-rated; TPO membrane
2.2 State & local Compliance	Design and construction shall conform to State and Local building codes and ordinances to include but not limited to the most current version of the following documents: • CA Mechanical Code • CA Plumbing Code • CA Building Code • CA Fire Code • Local Fire Department Regulations • National Fire Protection Association
2.3 Architectural	Interior Partitions: • 3-5/8" metal studs typical, gauge and spacing as required by code, with 5/8" type X gypsum board. • Mold and mildew resistant gypsum board shall be provided at all wet walls and in the GMP area • Standard interior partitions penetrate ceiling • Full height partitions to underside of structure where sound/security/rating requirements occur • Fire rated assemblies, full height, tunnel and shaft wall construction per code • Flat strap backing required in any walls where casework, appliances, equipment or fixtures will be mounted • Coordination with structural engineer will be required for any specialty requirements with heavy loads and tall walls exceeding max height requirements for 3-5/8" studs. • Drywall finish shall be level 4 at all areas. Level 5 required at any walls where wall coverings to be installed.



Insulation:

- Sound attenuation blankets to fit width of walls at all Offices, Conference Rooms, and Restrooms.
- R-19 insulation shall be provided at exterior walls

2.4 Doors, Frames & Hardware

Offices/ General Use Areas:

- Interior conference and office assemblies is to be 3' × 8'-10" minimum wood stained doors and side lites with aluminum knockdown frames by Wilson Partitions or equivalent
- Restroom doors to be 3' × 8'-0" wood slat doors with aluminum knockdown frames by Wilson Partitions or equivalent
- Lever style, heavy duty, satin aluminum hardware with components and ratings per code
- Keying to be compatible with Landlord's master system

Lab/ Lab Support/ Equipment/ Storage Areas:

- Door Assemblies are 3' × 8'-10" or pairs of wood stained doors with vision lites and/ or side lites with aluminum knockdown frames by Wilson Partitions or equivalent
- Lever style, heavy duty, satin aluminum cylindrical passage lockset hardware with components and ratings per code
- Include components and ratings as required by code
- Keying to be compatible with Landlord's master system

GMP Areas:

- Door Assemblies are 3' × 8'-0" or pairs of seamless hollow metal doors with vision lites in hollow metal frames

2.5 Ceiling System

General:

- T-Bar suspension installation per code
- Utilize Seismic clips at perimeter of T-bar in lieu of 2" wall angle

Open Office, Break Room

- Exposed to structure

Private Office Areas

- Ceiling height to be 10'-0" unless existing condition prohibits
- USG XL 2' × 2', 15/16" exposed T-Grid, white
- USG or equivalent 2' × 2' acoustic tile, Orion 75 with beveled tegular edge, white

Lab Areas

- Ceiling height to be 9'-0" unless existing condition prohibits
- Armstrong XL 2' × 4', 15/16" exposed T-grid, white
- Armstrong or equivalent 2' × 4' vinyl clad, white



ARTIVA BIOTHERAPEUTICS BASIS OF DESIGN
5505 MOREHOUSE DRIVE, SAN DIEGO, CALIFORNIA

Lab Support/Equipment and Storage Areas

- Armstrong XL 2' x 4', 15/16" exposed T-grid, white
- Armstrong or equivalent 2' x 4' vinyl clod, white

GMP Area

- Ceiling height to be 8' -2" unless existing condition prohibits
- Epoxy-painted suspended 5/8" gypsum board over metal stud ceiling joists
- USG 15/16" Donn Brand Centricitee heavy duty suspension ceiling system with square trim edge and gasket and seal or equivalent

2.6 Window Coverings

Exterior windows will be provided with window coverings by MechoShade Systems or Equivalent roller shades, with manual controls. Window coverings for upper windows in high boy open areas will be motorized.

2.7 Cabinetry

Architectural Millwork

- Construction designation APA C-D plugged with exterior glue, 3/4" thick or 3/4" high-pressure particle board for break rooms, copy/work rooms and conference rooms
- Countertops shall be of a solid surface material
- Concealed euro style hinges
- Adjustable shelf standards
- Stainless steel Bar pulls and/or 4mm wire pulls
- Full extension, heavy-duty drawer slides

Lab Casework

- Metal or plastic laminate with phenolic resin countertops

GMP Casework

- Metal or plastic laminate with phenolic resin countertops, or
- Stainless Steel with Stainless Steel countertops

2.8 Floor Covering

Office and Admin Areas

- Monterey or equal, overview multi-level loop pattern with 4" rubber base at offices, conference rooms, under systems furniture
- Polished and sealed concrete, elsewhere.

Lab/ Lab Support/ Equipment/ Storage Areas

- Vinyl Composition Tile, Armstrong or equivalent, 12" x12" x 1/8" with 4" rubber coved base; Moisture barrier, as required

GMP Area

- Sheet Vinyl flooring with coved base or coved epoxy flooring with 6" base, trimmed edge

Shipping/Receiving

- Sealed concrete with 4" rubber base



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Lobby Entry and Break Area

- Polished and sealed concrete

2.9 Lab Equipment

Fume Hoods:

Infrastructure for maximum of (6) 8' fume hoods on the first floor north side, infrastructure for (8) 8' fume hoods on the first floor south side, and infrastructure for (10) 8' fume hoods on the second floor north side. Only (2) 8' fume hoods are to be installed at the project commencement in the second floor north lab. The fume hoods may be refurbished units in good working and cosmetic condition if available.

Fume Hood Requirements:

- 36" deep minimum VAV hoods
- AIR, VAC – both sides
- Combo sash
- Lattice rods
- 3" grommets at each side with conduit for electrical cords
- (2) duplexes – at each side
- (2) Flammable Cabinets

Autoclave with point of use boiler in good working and cosmetic condition (2) under counter glass wash units with DI rinse

All other equipment, including non-ducted bio safety cabinets, to be provided by Tenant.

2.10 Fire Protection

Fire Sprinklers

- Spacing and number of heads to comply with recommendations of NFPA 13 for type of occupancy

Fire Extinguishers

- Semi recessed aluminum cabinets. Quantity and type as required by code.

Fire Alarm

- All devices required by code



BASIS OF DESIGN MECHANICAL

A. GENERAL:

1. All work shall be in conformance with current applicable codes, standards and references as adopted by the authorities having jurisdiction including, but not limited to:
 - a. California Building Code (CBC)
 - b. California Mechanical Code (CMC)
 - c. California Plumbing Code (CPC)
 - d. California Fire Code (CFC)
 - e. California Code of Regulations (CCR) - Title 24
 - f. Applicable local codes and ordinances.

B. REQUIREMENTS:

1. Summer-Winter HVAC for laboratory, office and ancillary support areas.
2. Building mechanical air exhaust systems for all laboratories.
3. Building mechanical air exhaust systems for all spaces requiring general exhaust.
4. Specialty exhaust systems to handle fumes from the laboratory fume hoods as necessary.

C. MECHANICAL SYSTEMS:

1. Lab and Classified Areas
 - a. 1st floor south and second floor labs: New 100% outside air modular air handling units with hot water heating coils and chiller water cooling coils, CAV boxes with hot water reheat coils, hot water piping, supply air ducts, diffusers, BMS controls, testing and balancing.
 - b. 1st floor north labs: New 100% outside air, packaged DX rooftop air conditioner with hot water heating coils, venturi type CAV valves with hot water reheat coils, hot water piping, supply and recirculating air ducts, low wall returns for ISO 7 rooms, fan-powered HEPA filters with room-side replaceable media, BMS controls, Magnehelic gages to measure differential pressure at classified are doorways, testing and balancing.
 - c. New rooftop utility set exhaust fans, exhaust CAV boxes for general exhaust, CAV venturi valves for classified areas and constant volume venturi valves for fume hoods, exhaust air ducts, diffusers, BMS controls, testing and balancing.



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BASIS OF DESIGN MECHANICAL

2. Office Areas

- a. Office Areas: Variable Refrigerant Flow OX Systems, supply and return ductwork, refrigerant piping, diffusers, thermostat installation, testing and balancing.
- b. A separate VRF system will serve each office area (2-total).

D. DESIGN CRITERIA:

1. Outdoor design conditions:

- a. Summer: 91°F DB, 72°F WB
17°F DB outdoor daily range
- b. Winter: 32°F DB

2. Indoor design conditions:

- a. Laboratory: 72°F DB $\pm$ 2°F DB
 $\leq$ 60% RH
- a. Office: 74°F $\pm$ 2° F DB
No Humidity Control

3. Air Change Rate:

- a. The air change rate in the second floor and first floor south lab areas will be at least 11 air changes per hour, based on 9 ft ceiling height.
- b. The first floor north classified rooms, QC, and the entry vestibule/gown/de-gowns rooms will be served by up to 10,600 cfm of single pass air for cooling and pressurization. Air change rates in the classified areas will be 60 for the ISO 7 rooms and 20 for ISO 8 rooms, through the use of fan-powered HEPA filters. Other non-classified rooms will be served by 4-pipe fan coils. Non classified areas will receive 6-8 air changes per hour. Ceiling heights in the classified areas will very likely need to be lower than 9' due to the high density of fan-powered HEPA filters and ductwork above the ceiling.
- c. The air change rate in the office areas will be dictated by loads.

4. Noise Level:

- a. All lab areas will be designed for a maximum noise level of NC-55, office areas will be designed for NC-35 and conference rooms will be designed for NC-30.





BASIS OF DESIGN MECHANICAL

E. EQUIPMENT:

1. 100% OSA packaged DX air conditioners (serving level 1 classified areas): Horizontal draw thru unit(s) complete with pre-filters, final filters, heating coil, cooling coil and centrifugal plenum fans. The supply fan and the associated VFD will be fully redundant.
2. 100% OSA modular Air Handling Units: Horizontal draw thru unit(s) complete with pre-filters, final filters, hot water heating coil, DX cooling coil and centrifugal plenum fans.
3. Variable refrigerant flow (VRF) systems: Outdoor Condensing Units with condenser coils, compressors, AC inverter. Indoor Heat Recovery Units. Indoor Fan Coil Units with evaporator coils, filters, fans.
4. Building Exhaust Fans:
 - a. Labs: SISW arrangement 10 centrifugal exhaust fans with B1 centrifugal wheel or Class I airfoil wheel.
 - b. General: Roof mounted downblast centrifugal fans.
 - c. The exhaust fan and the associated VFD serving the level 1 classified areas will be fully redundant.
5. Fan -powered HEPA filters
 - a. Room-side replaceable media, EC motors with manual speed control, challenge port, aluminum exposed materials
6. Diffusers and Return Air Grilles:
 - a. Flush with ceiling, modular, perforated type.
7. Fire/Smoke Dampers:
 - a. Damper and actuator assembly approved by UL5555 testing. Actuator outside of airstream. Rated per wall rating required.

F. MATERIALS:

1. Ductwork:
 - a. Ductwork will be fabricated from zinc coated sheet metal steel conforming in construction and weight to the ASH RAE and SMACNA Guide, latest Edition. All





BASIS OF DESIGN MECHANICAL

concealed indoor supply and return air ducts shall be insulated with R-4.2 minimum foil-faced fiberglass insulation. Outdoor supply and return air ducts shall be insulated with R-8 minimum foil-faced fiberglass insulation.

- b. Distribution ductwork downstream of main ducts shall be rectangular ducts of galvanized steel or pre-fabricated spiral lock-seam ducts and fittings.
- c. Final connection to ceiling diffusers and return air grilles in the office and common areas shall be made with a flexible duct.
- d. Ductwork to be used in the classified rooms will be cleaned at the fabrication facility and capped until installed.

2. Specialty Exhaust Ductwork:

- a. Exhaust ductwork not exposed to high concentrations of chemicals will be constructed of galvanized steel.
- b. Fume hood exhaust ductwork will be constructed of 304 stainless steel from fume hood to main exhaust duct.

3. Vibration Isolation:

- a. Spring isolators will be provided internally to isolate fans in air handling units and larger DX units. Smaller DX units to be provided with vibration isolation curbs as necessary. Spring hangers to be provided for VRF fan coil units.

4. Piping:

- a. Heating Hot Water: Type "L" Copper tube pipe and wrought copper fittings up to 2" in diameter, Schedule 40 black steel pipe and fittings above 2" in diameter.
- b. Necessary valves and other piping accessories will be provided where required for system control.
- c. Hot water piping will be insulated with heavy density fiberglass with vapor barrier jacket. Exposed and insulated piping will be jacketed with aluminum. Per 2016 Title 24 Code: Minimum 1" thick for heating hot water piping below 1" in diameter. Minimum 1.5" thick for heating hot water piping above 1" in diameter.





**BASIS OF DESIGN
MECHANICAL**

5. HVAC Controls (BMS):
 - a. All control points from new equipment will be integrated into the BMS system via BACnet. The BMS will automatically start the systems and provide the necessary control, monitoring, alarms and trending required for energy management.

END OF SECTION

5



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1.1 5505 Morehouse Drive - Artiva TI

1.1.1 Electrical Systems Description

A. Electrical Distribution

1. Normal Utility Power/ Main Building Switchgear
 - a. Provide power from existing SDGE service of 3000A 480Y/277V 3 phase 4 wire system.
 - b. Suite shall be provided with a minimum 600A 480Y/277V 3 phase 4 wire normal power feed.
 - c. Contractor shall coordinate with electrical engineer to provide complete short circuit, coordination and Arc Flash report for existing switchgear.
2. Emergency/Standby Power
 - a. Provide power from existing 500kw emergency power system consisting of a diesel fueled emergency generator in shell portion of project. Tenant space shall be provided with emergency distribution system to include panelboards and transformers that allow the tenant to have Sw/sqft.
 - b. The following systems and equipment shall be supplied with emergency/standby power based upon Code requirements:
 - Emergency and exit lighting (if not supplied with internal batteries)
 - Fire/smoke dampers
 - Fire Alarm system
 - Smoke Evac System
 - Emergency Lighting systems
 - c. The following processes and equipment shall be provided by emergency/standby power:
 - Building Management System (BMS)
 - Specialty lab equipment designated by tenant
 - Fume hood exhaust system equipment
 - Miscellaneous Equipment(as identified on equipment list)
 - Uninterruptible Power System (UPS) if provided by tenant
3. Uninterruptible Power Systems (UPS)
 - a. Essential product ion control systems and equipment shall be provided with a centralized uninterruptible power system if required by tenant.
4. Distribution Equipment
 - a. Panelboards
 - Panelboards for lighting and mechanical shall be 480Y/277V 3φ 4W or 208Y/ 120V 3φ 4W and shall be located in electrical equipment rooms or flush in new walls. All new panelboards shall be rated for calculated fault current ratings.
 - All panelboards shall have bolt-on circuit breakers, 42-pole space, bus ratings (as indicated on the panel schedules), copper bussing, and shall be either surface or flush mounted (as indicated on plans).
 - Panelboards shall be provided with a copper ground bus. All new 208Y/ 120V 3φ 4W panelboards shall be provided with 200% rated neutral bus.

- b. Feeders
 - Feeders shall be copper conductors (Type THHN or THWN) routed in electrometallic tubing (EMT), polyvinylchloride (PVC) conduit, or rigid galvanized steel (RGS) conduit. EMT shall be used in all indoor, concealed locations where the feeder is protected from damage or weather. RGS conduit shall be used in exterior applications or where the conduit may be exposed to physical damage. PVC shall be used for all below-grade applications.
 - Feeders shall be sized according to the singleline diagram in the construction documents.
 - Feeders shall be rack-mounted in accessible ceiling spaces or routed below grade under the slab.
5. Branch Circuitry
 - a. Conduit and Wire
 - Branch circuits for all lighting, power circuits serving convenience outlets, control power, etc. shall be nominally sized as 120V/277v 20A.
 - Branch circuits may be increased in size for specific loads or as necessary to prevent excessive voltage drop on longer circuits.
 - MC cable to be provided as needed for concealed wall wiring, and other approved locations.
6. Electrical Devices
 - a. Electrical devices including (receptacles and switches) shall be rated according to the load served.
 - b. Electrical devices shall be white in color with white thermoplastic cover plates.
 - c. Cover plates for receptacles and junction boxes shall be labeled indicating the circuit and panelboard from which the device is fed.
7. Lighting Systems
 - a. Fixtures shall be suitable for the application including the ability to provide egress illumination where required.
 - b. Fixtures shall meet U.L. requirements and selection and placement of fixtures shall comply with ADA requirements.
 - c. All lighting fixtures shall operate at 277V or 120V unless specifically noted otherwise.
 - d. Fixture lamping and quantities must comply with the Title 24 energy budget.
 - Fixtures to be LED where possible to extend lamp life and reduce wattage
 - e. Dimming drivers to be provided for all new fixtures unless specified otherwise.
 - f. Photocell control shall be provided for all Title 24 required areas.
 - g. Motion sensors shall be provided for all lab, office, storage and support areas.

8. Lighting Control Systems
 - a. Lighting control shall comply with Title 24 requirements (including over-ride control for automatically shutting the lights off at prescribed periods of time and the ability to over-ride the lighting control for up to two hours of use).
 - b. Lighting control equipment shall include a programmable lighting control panel, relay panels (quantity as necessary), over-ride switches (distributed throughout the space), and interconnecting conductors. Control panel to be provided with required hardware and software for interface with mechanical energy management systems.
 - c. Each office area shall be controlled by dual-level switching or dimming for local control. This design selection was chosen based on meeting the California State 2020 Title 24 requirements as well as giving a better automatic control reducing overall energy usage.
9. Mechanical System Connections
 - a. Power shall be provided from the 480Y/277V or 208/120V system for line voltage to mechanical equipment.
 - b. Control power wiring regardless of voltage shall be by the mechanical contractor.
 - c. Smoke control systems shall be provided and installed by mechanical.
 - d. Motor starters and disconnect switches shall be provided by the electrical contractor according to the control wiring diagrams provided by the mechanical contractor.
10. Telephone/Data Systems
 - a. Telephone, security and data system 120V power connections at locations required.
 - b. Provide conduit riser system as required for interconnection between floors.
 - c. Cabling system design, system hardware, system cable and installation of signal system is not part of the electrical contract.
11. Security Systems
 - a. Provide required conduit, junction boxes and power sources for security devices.
12. Grounding

Electrical grounding shall be provided as follows:

 - a. Electrical code required systems and equipment grounding.
 - b. Ground bus at telephone and data rooms
 - c. Ground bus at laboratory and manufacturing areas where solvent use is identified for code required vessel grounding and bonding.



13. Emergency Transfer Switch

- a. Automatic Transfer switch shall be furnished as 480V 3ph configuration type.

1.2 Electrical Systems Design Criteria

1.2.1 Codes, Guidelines and Standards

Electrical systems and equipment shall be designed to comply with the Codes, Guidelines, and Standards identified in NFPA 70, NFPA 70E and NFPA 110.

1.2.2 Power Systems

In general, electrical outlets to be provided to supply power to all offices, systems furniture, Conference Rooms, appliances, mechanical equipment, etc.

A. Common Area Support

1. One (1) duplex receptacle within 25 feet of all mechanical equipment for servicing and maintenance.
2. One (1) duplex convenience receptacle for approximately every 250 square feet.
3. At least one (1) duplex receptacle installed 40'-0" on center in circulation spaces.

B. Coffee Stations

1. At least two (2) duplex receptacles will be installed at each coffee station. In general, receptacles will be located above counter tops and will be of the GFCI type.

C. Conference Rooms

1. One (1) recessed, shared ganged floor mounted receptacle at conference room table. Location to be verified with table manufacturer.
2. Large Conference Rooms: Two (2) recessed shared ganged floor mounted receptacle at each end of the table. Location to be verified with table manufacturer.

D. MDF/IDF Rooms

1. MDF/IDF room(s) shall be provided with a minimum of two (2) generator back up 120V, 20A branch circuits and two (2) 120V, 20A general-purpose receptacles will be required and must be supplied from the building's normal distribution system. Coordinate with tenant for exact requirements.

E. Offices/Open Office Areas

1. Connections to systems furniture in open office areas will utilize floor mounted outlets where concealed wall space is unavailable.
2. Systems furniture shall be supplied with three (3) dedicated branch circuits to each cluster of six cubicles for three-circuit configurations. Four (4) dedicated branch circuits shall be provided to each cluster of eight cubicles for four-circuit configurations.
3. Special purpose outlets will be installed for all specialized equipment such as printers, copiers, fax machines and appliances.

F. Restrooms

1. At least one (1) duplex receptacle will be installed in each restroom. Typically, receptacles will be located above the vanity and will be of the GFCI type.



- G. Storage Rooms
 - 1. At least one (1) duplex receptacle installed.
- H. Testing
 - 1. Contractor to provide electrical GFI testing, breaker testing and cable Meggar testing for entire electrical system. Breaker testing shall be done on all circuit breakers 400A and above.
- I. Coordination Study and Arc Flash Study
 - 1. Contractor to engage approved engineer to perform a complete coordination study and Arc Flash report with labeling for entire TI project



Schedule 3

Subsequent Premises Critical Dates Schedule and Project Schedule²

Based on 04/19/2021 NTP Date	*Tenant Improvement
Final CP-4 Space Plan	04/27/2021
Final CP-5 Space Plan	06/07/2021
Final Artiva Equipment List	05/12/2021
TI: CP-4 Design Development Complete	05/28/2021 (Followed by 5 day review and approval)
TI: CP-5 Design Development Complete	06/21/2021 (Followed by 5 day review and approval)
City Permit Approval (C&S: CP-2)	05/04/2021
City Permit Submittal Complete (TI: CP-4) (Submit for plan check)	07/20/2021 (Followed by 5 day review and approval)
City Permit Submittal Complete (TI: CP-5) (Submit for plan check)	08/03/2021 (Followed by 5 day review and approval)
City Permit Approval (TI: CP-4)	10/14/2021
City Permit Approval (TI: CP-5)	10/28/2021
CP-4 Substantial Completion	04/15/2022
CP-5 Substantial Completion	06/14/2022

* Review and approval dates are to be business days.

If any of the stages noted above (e.g., Space Plan, Schematics etc.) is not finalized and approved by Tenant and Landlord within the applicable 5, 10 or 15-day period noted above after initial delivery to Tenant for review, then each day thereafter until applicable stage is finalized shall constitute Tenant Delay (unless failure to complete such stage resulted from Landlord's failure to provide a response within the required time period).

² References in this Schedule 3 to "CP-5" mean the "Subsequent Premises".



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Schedule 4

Project Responsibility Matrix

<u>DESCRIPTION</u>	<u>ALLOCATION</u>		
	<u>Provided by Landlord as part of Core & Shell</u>	<u>Provided by Landlord as part of the Tenant Improvement Fund</u>	<u>Provided by Tenant at Tenant Cost</u>
GENERAL			
Parking spaces provided (108)	X		
Permits & Fees			
Building Core & Shell Permit & Fees	X		
All Tenant Improvement Permits & Fees		X	
SITEWORK			
Designated Loading Area	X		
Trash Enclosure (in Garage)	X		
New Generator Enclosure	X		
Central Plant/Service Yard Equipment and Enclosure	X		
Existing Sanitary Sewer (6")	X		
Existing Storm Drain Connections	X		
Existing SDG&E Service	X		
Existing Domestic Water Service (3") & Backflow Preventer	X		
Existing Fire Water Service (4")	X		
Exterior Nitrogen (NZ) Bulk Tank (1500 gallons) including Exterior Enclosure with concrete pad and screening element. Also includes Type K Copper Piping extending underground from N2 Enclosure to riser located in building. Includes N2 riser within building.	X		
Monument Signage for Tenant		X	
Site FF&E (No site FF&E currently proposed, Tenant cannot use TIA for this item)			X
LANDSCAPING			
New ADA Pathway from right-of-way to building entry	X		
Existing Landscaping	X		
Existing Hardscape	X		
STRUCTURE			
Existing steel frame structure over pre-cast columns and double tees	X		
New MEP Equipment Pads and Supplemental Support for Warm Up	X		
New MEP Equipment Pads and Supplemental support for redundant supply and redundant exhaust fans for Tenant Improvement		X	
Existing Shaft Opening to remain or be infilled as needed	X		
New Shaft Openings for Warm Shell Infrastructure	X		
New Shaft Openings for Tenant infrastructure		X	
Egress Stairs as required by code	X		
ROOFING			
Class 'A' roofing system and insulation	X		
Existing Roof Penetration	X		
New Roof Penetrations for Warm Shell Equipment	X		
New Roof Penetrations for Tenant Equipment		X	
EXTERIOR			
New water tight base building exterior skin system	X		
Base Building Entrances	X		
Building mounted Tenant signage in accordance with City of San Diego rules and regulations		X	
Roof screen designed to obscure Warm Shell rooftop equipment.	X		
COMMON AREAS			
New enclosed atrium/lobby. including interior finishes	X		
L1-l 3 Feature Stair & Bridge, including: Permanent Guardrails, permanent, seismic joint covers, Flooring, Ceilings/Soffits/Vertical Fabrication, Partitions, and lighting	X		
New Restrooms & Janitor's Closets, including Partitions, Finishes, Mechanical and Electrical Systems, Equipment. Fixtures.	X		
Base building finishes in Elevator Machine Room(s)	X		
West Egress stairway with new finishes to be determined by landlord	X		
Code required signage for all base building rooms (Elevator Machine Room(s) and MPOE/Main Electrical Room).	X		
Main Electrical Room and MPOE rooms.	X		
Common Electrical, IDF, Tele Data Rooms	X		

Elevators with standard finishes (Qty (2) 4-stop hydraulic elevators by Otis)

X

New 4-stop, 5,000lb Capacity service elevator

X

HazMat Storage Shed

X

WINDOW TREATMENT

Interior Window Treatments

X

Manual Mechoshades

X

Blocking, Perimeter Soffit/Window Treatment Support

X



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TENANT AREAS

Building interiors delivered in shell condition	X		
Drywall at inside face of exterior walls		X	
Finishes at inside face of exterior walls		X	
L1-L2 interior Glazing/Walls and Doors at Huddle Room inside Atrium.	X		
Perimeter soffits at exterior walls.		X	
Finishes at inside face at Tenant side of core partitions		X	
Electrical closets within Tenant Premises		X	
Tenant Tele/data/IDF rooms		X	
Tenant break or kitchen areas		X	
Partitions, ceilings, flooring, painting, finishes, doors, frames, hardware, millwork, casework, and buildout.		X	
Wire shelving & chemical racking systems			X
All casework in tenant areas		X	
Fixtures, Furniture, Equipment (FF&E)			X
Lab equipment, including but not limited to: biosafety cabinets, freezers/refrigerators, storage racks, incubators, etc.			X
(2) 8' fume hoods, small autoclave/point-of-use boiler, and (2x) under counter glass-wash units with D1 rinse		X	
(2) Dishwashers, (4) refrigerators, garbage disposals, and hands-free faucets at sinks that will remain with the property		X	
Audio Visual Equipment, low-voltage cabling, and associated supports			X
All interior code required signage for Tenant Premises		X	
All wayfinding signage and tenant specific signage for branding purposes (except the building signage and monument signage)			X

FIRE PROTECTION

Existing Fire Protection System, in shell condition	X		
Modification of sprinkler branch and main piping and head locations to suit Tenant layout & hazard index		X	
Specialized extinguishing systems			X
Fire extinguishers and cabinets at Tenant Premises		X	
Painting of any fire sprinkler piping in tenant premises		X	

PLUMBING

Existing Building Sanitary Waste and Vent System	X		
Existing Domestic Water System	X		
Domestic Water Heater	X		
Industrial Water Heater	X		
Existing Roof Drainage System	X		
Plumbing risers, fixtures, piping for new restrooms & janitor closets	X		
Plumbing distribution within tenant spaces		X	
House systems for tenant's shared use: RODI water, compressed dry air, lab vacuum, N2	X		

NATURAL GAS

Existing Natural Gas Service	X		

HEATING, VENTILATION, AIR CONDITIONING

Existing Mechanical Equipment to be reused includes one (160-ton chiller manufactured by Carrier in 2018) and two B&G CHW pumps at 7.5 hp each. All other existing mechanical equipment to be removed. This Mechanical Equipment will supply LI/L2 Tenant Improvements.	X		
Mechanical Equipment required for Interior Warm Up of Atrium and Restrooms. Includes but not limited to: AHU's, Boilers, Pumps, Make-up Fans, Automation/Controls and associated piping, support.	X		
Mechanical Equipment required for Warm Up of Level 1 & 2 Tenant Premises. Includes but not limited to: AHU's with no humidification control, Boilers, Pumps, Make-up Fans, Automation/Controls and associated piping, support	X		
Supplemental mechanical equipment includes but not limited to: Redundant Exhaust fan, Redundant Supply Fan, Controls, associated piping, support.		X	
Atrium Smoke Evacuation System including (2) New Rooftop 50K CFM Exhaust Fans, Gravity Ventilator System, louvered Intake, Linear Bar Grilles and related shaft, ductwork and controls.	X		
Air handling units for the atrium providing 100% outside air.	X		
Air Distribution in Tenant Premises		X	
Air Distribution in Atrium	X		
Hydronic Piping Distribution in Tenant Premises		X	
Hydronic Piping Distribution in Atrium	X		
ELECTRICAL			
New Electrical Service (3000 A, 277/480 V, 3-ph, 4-wire)	X		



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Power Distribution within Tenant Premises		X	
Emergency Power Generator providing shared capacity. Minimum 4 W/sf to be available for tenant's use.	X		
Lighting in MPOE, EMR, and Main Electrical Room.	X		
Lighting in tenant areas.		X	
FIRE ALARM			
Base Expandable Fire Alarm System at Elevators, Garage, Core Areas.	X		
Fire Alarm System, subpanels and Devices for Tenant Premises with integration into Base Building System.		X	
TELEPHONE/DATA			
Existing Pathways to MPOE	X		
Fiber Optic Service			X
Low-voltage cabling, Security, A/V			X
Provisioning of circuits and service from service providers.			X
SECURITY			
Card access at main east and west entries at L1 and L2 (total 4 locations).	X		
Tenant Security Systems			X



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EXHIBIT D TO LEASE**ACKNOWLEDGMENT OF COMMENCEMENT DATE**

This **ACKNOWLEDGMENT OF COMMENCEMENT DATE** is made this day of , , between **ARE-SD REGION NO. 66, LLC**, a Delaware limited liability company (“**Landlord**”), and **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Tenant**”), and is attached to and made a part of the Lease dated , (the “**Lease**”), by and between Landlord and Tenant. Any initially capitalized terms used but not defined herein shall have the meanings given them in the Lease.

Landlord and Tenant hereby acknowledge and agree, for all purposes of the Lease, that the Commencement Date of the Base Term of the Lease is , , the Subsequent Premises Commencement Date is , , the Rent Commencement Date is , , the Subsequent Premises Rent Commencement Date is , , the Suite 120 Rent Commencement Date is , , and the termination date of the Base Term of the Lease shall be midnight on , . In case of a conflict between the terms of the Lease and the terms of this Acknowledgment of Commencement Date, this Acknowledgment of Commencement Date shall control for all purposes.

IN WITNESS WHEREOF, Landlord and Tenant have executed this ACKNOWLEDGMENT OF COMMENCEMENT DATE to be effective on the date first above written.

TENANT:

ARTIVA BIOTHERAPEUTICS, INC.,
a Delaware corporation

By: _____

Its: _____

By: _____

Its: _____

LANDLORD:

ARE-SD REGION NO. 66, LLC,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership,
managing member

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

By: _____

Its: _____



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EXHIBIT E TO LEASE

Rules and Regulations

1. The sidewalk, entries, and driveways of the Project shall not be obstructed by Tenant, or any Tenant Party, or used by them for any purpose other than ingress and egress to and from the Premises.
2. Tenant shall not place any objects, including antennas, outdoor furniture, etc., in the parking areas, landscaped areas or other areas outside of its Premises, or on the roof of the Project.
3. Except for animals assisting the disabled, no animals shall be allowed in the offices, halls, or corridors in the Project.
4. Tenant shall not disturb the occupants of the Project or adjoining buildings by the use of any radio or musical instrument or by the making of loud or improper noises.
5. If Tenant desires telegraphic, telephonic or other electric connections in the Premises, Landlord or its agent will direct the electrician as to where and how the wires may be introduced; and, without such direction, no boring or cutting of wires will be permitted. Any such installation or connection shall be made at Tenant's expense.
6. Tenant shall not install or operate any steam or gas engine or boiler, or other mechanical apparatus in the Premises, except as specifically approved in the Lease. The use of oil, gas or inflammable liquids for heating, lighting or any other purpose is expressly prohibited. Explosives or other articles deemed extra hazardous shall not be brought into the Project.
7. Parking any type of recreational vehicles is specifically prohibited on or about the Project. Except for the overnight parking of operative vehicles, no vehicle of any type shall be stored in the parking areas at any time. In the event that a vehicle is disabled, it shall be removed within 48 hours. There shall be no "For Sale" or other advertising signs on or about any parked vehicle. All vehicles shall be parked in the designated parking areas in conformity with all signs and other markings. All parking will be open parking, and no reserved parking, numbering or lettering of individual spaces will be permitted except as specified by Landlord.
8. Tenant shall maintain the Premises free from rodents, insects and other pests.
9. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs or who shall in any manner do any act in violation of the Rules and Regulations of the Project.
10. Tenant shall not cause any unnecessary labor by reason of Tenant's carelessness or indifference in the preservation of good order and cleanliness. Landlord shall not be responsible to Tenant for any loss of property on the Premises, however occurring, or for any damage done to the effects of Tenant by the janitors or any other employee or person.
11. Tenant shall give Landlord prompt notice of any defects in the water, lawn sprinkler, sewage, gas pipes, electrical lights and fixtures, heating apparatus, or any other service equipment affecting the Premises.
12. Tenant shall not permit storage outside the Premises, including without limitation, outside storage of trucks and other vehicles, or dumping of waste or refuse or permit any harmful materials to be placed in any drainage system or sanitary system in or about the Premises.
13. All moveable trash receptacles provided by the trash disposal firm for the Premises must be kept in the trash enclosure areas, if any, provided for that purpose.



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14. No auction, public or private, will be permitted on the Premises or the Project.
15. No awnings shall be placed over the windows in the Premises except with the prior written consent of Landlord.
16. The Premises shall not be used for lodging, sleeping or cooking or for any immoral or illegal purposes or for any purpose other than that specified in the Lease. No gaming devices shall be operated in the Premises.
17. Tenant shall ascertain from Landlord the maximum amount of electrical current which can safely be used in the Premises, taking into account the capacity of the electrical wiring in the Project and the Premises and the needs of other tenants, and shall not use more than such safe capacity. Landlord's consent to the installation of electric equipment shall not relieve Tenant from the obligation not to use more electricity than such safe capacity.
18. Tenant assumes full responsibility for protecting the Premises from theft, robbery and pilferage.
19. Tenant shall not install or operate on the Premises any machinery or mechanical devices of a nature not directly related to Tenant's ordinary use of the Premises and shall keep all such machinery free of vibration, noise and air waves which may be transmitted beyond the Premises.
20. Tenant shall cause any vendors and other service providers hired by Tenant to perform services at the Premises or the Project to maintain in effect workers' compensation insurance as required by Legal Requirements and commercial general liability insurance with coverage amounts reasonably acceptable to Landlord. Tenant shall cause such vendors and service providers to name Landlord and Alexandria Real Estate Equities, Inc. as additional insureds under such policies and shall provide Landlord with certificates of insurance evidencing the required coverages (and showing Landlord and Alexandria Real Estate Equities, Inc. as additional insureds under such policies) prior to the applicable vendor or service provider providing any services to Tenant at the Project.
21. Neither Tenant nor any of the Tenant Parties shall have the right to photograph, videotape, film, digitally record or by any other means record, transmit and/or distribute any images, pictures or videos of all or any portion of the Premises or the Project.
22. Tenant shall regularly review the guidelines published by the Centers for Disease Control (CDC) and any state and/or local Governmental Authorities, and will implement the practices and procedures suggested thereby, as well as industry standard best practices, to prevent the spread of Infectious Conditions, including, without limitation, COVID-19.
23. Landlord shall have the right to (a) require tenants to implement and enforce reasonable screening and tracking protocols intended to identify and track the activity at the Project of employees, agents, contractors and visitors seeking access to or accessing the Premises and or the Project exhibiting flu-like symptoms or symptoms consistent with those associated with any currently known or unknown Infectious Conditions including, without limitation, COVID-19 (collectively, "**Symptoms**"), (b) require tenant employees, agents, contractors and visitors to comply with reasonable screening and tracking protocols implemented by Landlord, Landlord's property manager and/or any operator of Project Amenities, intended to identify and track the activity at the Project of individuals seeking access to or accessing the Premises or the Project (including the Project Amenities) exhibiting Symptoms, (c) require tenants to implement and enforce protocols to prohibit individuals exhibiting Symptoms, from accessing the Premises and/or the Project, (d) require tenants to immediately report to Landlord incidences of (i) tenant employees, agents, contractors and visitors accessing the Premises or any portion of the Project while exhibiting Symptoms, and/or (ii) tenant employees, agents, contractors and visitors known to have accessed the Premises or the Project being diagnosed with an Infectious Condition including, without limitation, COVID-19.



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24. Landlord may exclude or expel from the Project any person that has Symptoms associated with any currently known or unknown Infectious Condition including, without limitation, COVID-19.

25. Notwithstanding anything to the contrary contained herein, if, at any time during the Term, Landlord becomes aware that any Tenant Party exhibiting Symptoms and/or diagnosed with an Infectious Condition had access to the Premises or any portion of the Project (including, without limitation, the Project Amenities), Tenant shall be responsible for any costs incurred by Landlord to perform additional or deep cleaning of the Premises and/or the Common Areas of the Project or to take other measures deemed reasonably necessary or prudent by Landlord which are intended to limit the spread of such Infectious Condition due to such Tenant Party's presence at the Project.

26. Landlord reserves the right to implement additional rules and regulations relating to access to the Premises, the Building and/or the Project (including, without limitation, the Project Amenities) which are intended to promote and protect health and physical well-being and/or intended to limit the spread of Infectious Conditions.



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EXHIBIT F TO LEASE

TENANT'S PERSONAL PROPERTY

None.



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EXHIBIT G TO LEASE

TENANT MAINTENANCE OBLIGATIONS
Multi-Tenant Maintenance Responsibilities
5505 Morehouse
Drive Artiva
Maintenance Responsibilities: Multi-Tenant**Utilities**ArtivaARE

Water - domestic

✓

Water - irrigation

✓

Gas - tenant premises

✓

Gas - common area

✓

Electric - tenant premises

✓

Electric - common area

✓

Exterior / Site

Landscaping

✓

Pest control - exterior

✓

Parking lot sweeping

✓

Project security (nightly rounds)

✓

Parking lot lighting

✓

Exterior monument and footpath lighting

✓

Landscape irrigation

✓

Exterior window washing

✓

Roof inspections

✓

Domestic backflow preventer certification - Industrial / Domestic

✓

Domestic backflow preventer certification - Fire

✓

Building Interior and Systems

Cold rooms (if applicable)

✓

Autoclaves (if applicable)

✓

Glassware washers

✓

RO/DI laboratory water systems

✓

Air compressors

✓

Vacuum pumps

✓

Traps for vacuum pumps (in-suite)

✓

Laboratory gas distribution systems

✓

Nitrogen procurement & refills

✓

Emergency eyewash and shower stations

✓

Internal UPS units (if applicable)

✓

Fire extinguisher inspection / certification - common area

✓

Fire extinguisher inspection / certification - tenant premises

✓

Fire sprinkler system

✓

Fire alarm system (and phone lines)

✓

Building HVAC equipment

✓

Smoke fire dampers

✓

Security alarm - tenant premises (if applicable)

✓

Security cameras - common area (if applicable)

✓

Security cameras - tenant premises (if applicable)

✓

Access controls - common area

✓

Access controls - tenant premises

✓

Janitorial - common area

✓

Janitorial - tenant premises

✓

I/R Testing of electrical systems

✓

Emergency generator

✓

Building Management Systems (BMS)

✓

Environmental monitoring

✓

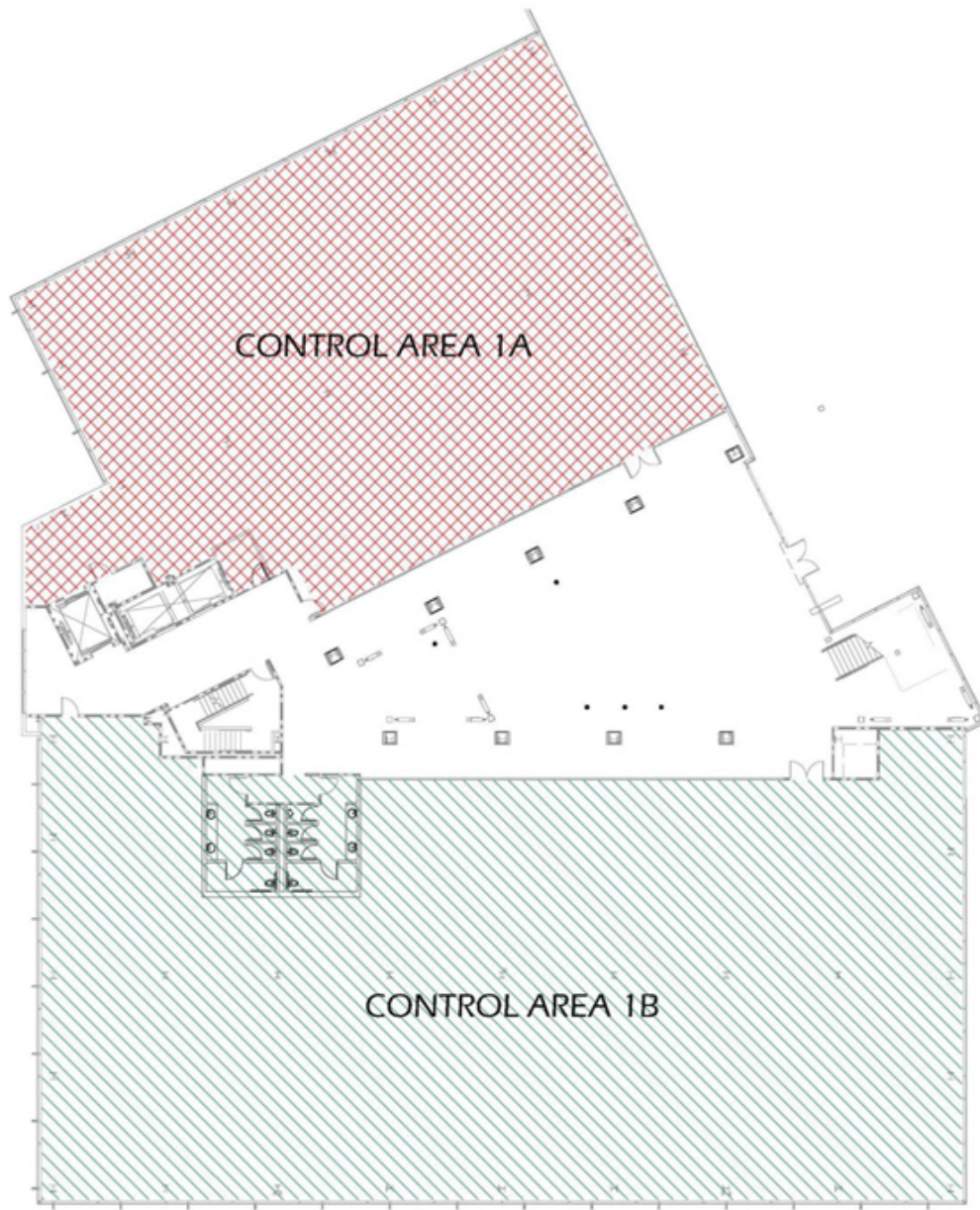
Trash/Recycling Removal

✓



EXHIBIT H TO LEASE

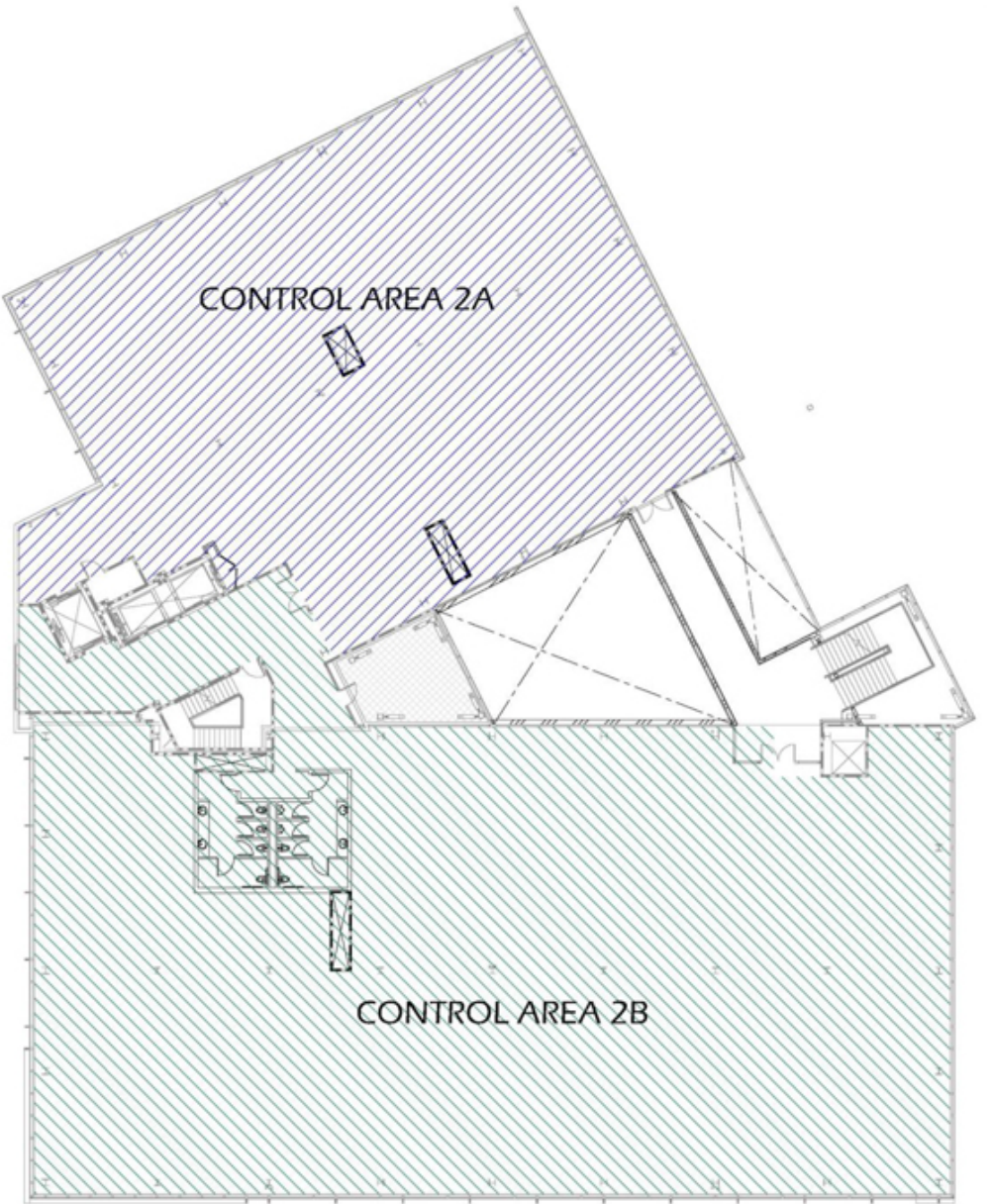
CONTROL AREAS



CONTROL AREA PLAN - LEVEL 1



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CONTROL AREA PLAN - LEVEL 2



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EXHIBIT I TO LEASE

SIGNAGE

OWNER / MANAGER	PROJECT
SIGN EXHIBITS - 4 / 19 / 21	DESIGN / BUILD
 ALEXANDRIA®	
 GLANZ SIGNING+GRAPHICS 8630 PRODUCTION AVE. SAN DIEGO, CA 92121 PH 858.578.8487 FX 858.578.5488 LIC. #494347	TENANT SIGNAGE EXHIBIT



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BUILDING WALL
SIGN EXAMPLE

REVERSE CHANNEL HALO LIT EXAMPLE

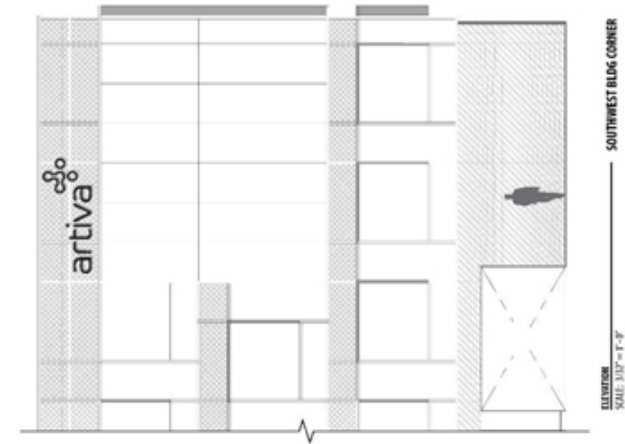


CHANNEL FACE LIT EXAMPLE



BUILDING WALL SIGNAGE - GENERAL
SEE QUALITY AND FABRICATION STANDARDS FOR THE BUILDING DESIGN. SIGNAGE TO CONFORM TO GENERAL CITY OF SAN DIEGO SIGN REGULATIONS, AND ANY EXISTING CITY OF SAN DIEGO PLANS THAT MAY BE RECORDED.

BUILDING WALL SIGNAGE - SPECIFIC
LANDMARK TO APPROVE LAYOUT, POSITIONING, FABRICATION & LIGHTING. SIGNAGE TOTAL AREA SHALL NOT EXCEED 10% OF THE BUILDING'S EXTERIOR WALL AREA. SIGNAGE SHALL BE SUBMITTED TO CITY PLANNING AND OVERSIGHT FOR REVIEW & APPROVAL.



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GLANZ
SIGNING+GRAPHICS



LICENSE AGREEMENT

THIS LICENSE AGREEMENT (the “**Agreement**”) is made as of this 16 day of June, 2021, between **ARE-SD REGION NO. 37, LLC**, a Delaware limited liability company (“**Licensor**”), and **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Licensee**”).

RECITALS:

A. Licensor is the owner of that certain real property (the “**Project**”) at which that certain building commonly known as 4025 Sorrento Valley Road, San Diego, California (“**Building**”) is located.

B. As of the date of this Agreement, Licensee and ARE-SD Region No. 66, LLC, a Delaware limited liability company (“**Morehouse Landlord**”), an affiliate of Licensor, are in the process of negotiating a lease agreement pursuant to which Licensee would lease space consisting of approximately 51,621 rentable square feet of space in that certain building commonly known as “**5505 Morehouse Drive**,” pursuant to terms and conditions otherwise acceptable to Licensee and Morehouse Landlord, each in their sole and absolute discretion (the “**Morehouse Lease**”).

C. Licensee desires to have a temporary license to use the Building containing approximately 11,960 rentable square feet of space, as more particularly shown on **Exhibit A** attached hereto (the “**Licensed Premises**”).

D. Licensee and Licensor wish to confirm the terms and conditions upon which Licensee may use the Licensed Premises.

NOW, THEREFORE, in consideration of the mutual covenants herein expressed and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Licensee and Licensor agree as follows:

1. Grant of License. Licensor hereby grants to Licensee a license to enter into and use the Licensed Premises for the use described below commencing on the date that is 1 business day after the mutual execution and delivery of this Agreement by the parties (the “**License Commencement Date**”). Licensor shall deliver the Licensed Premises to Licensee on the License Commencement Date. The term (the “**Term**”) of the license granted pursuant to this Section 1 shall expire on the earlier of (a) the date that is 15 days after the Commencement Date (as defined in the Morehouse Lease) of the Morehouse Lease, or (b) the termination of this Agreement for Cause (as defined in Section 7); provided, however, that if the Morehouse Lease terminates such that the Commencement Date (as defined in the Morehouse Lease) of the Morehouse Lease never occurs, then this Agreement shall terminate on April 30, 2022.

Licensee hereby accepts the Licensed Premises in its “as-is” condition as of the License Commencement Date and Licensor is hereby expressly relieved and released from any duty or obligation to make any improvements or alterations to the Licensed Premises prior to or after the License Commencement Date. Nothing in this paragraph shall limit Licensor’s maintenance obligations under Section 12 below. Licensee hereby further acknowledges that Licensor has made no representation as to the condition of the Licensed Premises or the suitability of the Licensed Premises or the Project for Licensee’s intended use.

2. Waiver of Liability and Indemnification. Licensee warrants that it will use reasonable care to prevent damage to property and injury to persons while on the Project under this Agreement. Licensee hereby indemnifies and agrees to defend, save and hold Licensor, its officers, directors, employees, managers, agents, sub-agents, constituent entities and lease signators (collectively, “**Licensor Indemnified Parties**”) harmless from and against any and all claims for injury or death to persons or damage to property occurring within or about the Licensed Premises, arising directly or indirectly out of use or occupancy of the Licensed Premises by Licensee or any of Licensee’s Related



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Parties, or a breach or default by Licensee in the performance of any of its obligations hereunder, except to the extent caused by the willful misconduct or gross negligence of Licensor Indemnified Parties. Licensor Indemnified Parties shall not be liable to Licensee for, and Licensee assumes all risk of damage to, personal property (including, without limitation, loss of records kept within the Licensed Premises). Licensee further waives any and all claims for injury to Licensee's business or loss of income relating to any such damage or destruction of personal property (including, without limitation, any loss of records). Licensor Indemnified Parties shall not be liable for any damages arising from any act, omission or neglect of any tenant or other licensee at the Project or of any other third party. The provisions of this Section 2 shall survive the expiration or earlier termination of this Agreement.

3. Insurance of Licensee. Licensee, at its sole cost and expense, shall maintain during the Term: all risk property insurance with business interruption and extra expense coverage, covering the full replacement cost of all property and improvements installed or placed in the Licensed Premises by Licensee at Licensee's expense; workers' compensation insurance with no less than the minimum limits required by law; employer's liability insurance with employers liability limits of \$1,000,000 bodily injury by accident – each accident, \$1,000,000 bodily injury by disease – policy limit, and \$1,000,000 bodily injury by disease – each employee; and commercial general liability insurance, with a minimum limit of not less than \$2,000,000 per occurrence for bodily injury and property damage with respect to the Licensed Premises. The commercial general liability insurance maintained by Licensee shall name Alexandria Real Estate Equities, Inc., and Licensor, its officers, directors, employees, managers, agents, sub-agents, constituent entities and lease signators (collectively, "**Licensor Insured Parties**"), as additional insureds; insure on an occurrence and not a claims-made basis; be issued by insurance companies which have a rating of not less than policyholder rating of A and financial category rating of at least Class X in "Best's Insurance Guide"; shall not be cancelable for nonpayment of premium unless 30 days prior written notice shall have been given to Licensor from the insurer; not contain a hostile fire exclusion; contain a contractual liability endorsement; and provide primary coverage to Licensor Insured Parties (any policy issued to Licensor Insured Parties providing duplicate or similar coverage shall be deemed excess over Licensee's policies, regardless of limits). Copies of such policies (if requested by Licensor), or certificates of insurance showing the limits of coverage required hereunder and showing Licensor as an additional insured, along with reasonable evidence of the payment of premiums for the applicable period, shall be delivered to Licensor by Licensee (i) concurrent with Licensee's delivery to Licensor of a copy of this Agreement executed by Licensee, and (ii) prior to each renewal of said insurance. Licensee's policy may be a "blanket policy" with an aggregate per location endorsement which specifically provides that the amount of insurance shall not be prejudiced by other losses covered by the policy. Licensee shall, at least 5 days prior to the expiration of such policies, furnish Licensor with renewal certificates.

Licensor shall maintain all risk property and, if applicable, sprinkler damage insurance covering the full replacement cost of the Project. Licensor shall further procure and maintain commercial general liability insurance with a single loss limit of not less than \$2,000,000 for bodily injury and property damage with respect to the Project. Licensor may, but is not obligated to, maintain such other insurance and additional coverages as it may deem necessary, including, but not limited to, flood, environmental hazard and earthquake, loss or failure of building equipment, errors and omissions, rental loss during the period of repair or rebuilding, workers' compensation insurance and fidelity bonds for employees employed to perform services and insurance for any improvements installed by Licensee or which are in addition to the standard improvements customarily furnished by Licensor without regard to whether or not such are made a part of the Project. All such insurance shall be included as part of Operating Expenses. The Project may be included in a blanket policy (in which case the cost of such insurance allocable to the Project will be determined by Licensor based upon the insurer's cost calculations). Licensee shall also reimburse Licensor for any increased premiums or additional insurance which Licensor reasonably deems necessary as a result of Licensee's use of the Licensed Premises.

The property insurance obtained by Licensee and any property insurance maintained by Licensor shall include a waiver of subrogation by the insurers and all rights based upon an assignment from its insured, against Licensor or Licensee, and their respective officers, directors, employees, managers,



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agents, invitees and contractors ("**Related Parties**"), in connection with any loss or damage thereby insured against. Neither party nor its respective Related Parties shall be liable to the other for loss or damage caused by any risk insured against under such property insurance, and each party waives any claims against the other party, and its respective Related Parties, for such loss or damage. The failure of a party to insure its property shall not void this waiver. Licensor and its respective Related Parties shall not be liable for, and Licensee hereby waives all claims against such parties for, business interruption and losses occasioned thereby sustained by Licensee or any person claiming through Licensee resulting from any accident or occurrence in or upon the Licensed Premises or the Project from any cause whatsoever. If the foregoing waivers shall contravene any law with respect to exculpatory agreements, the liability of Licensor or Licensee shall be deemed not released but shall be secondary to the other's insurer.

4. Use. Licensee's use of the Licensed Premises is strictly limited to use as a research and development laboratory, related office and other related uses consistent with the character of the Project. Licensee shall not make any alterations, additions, or improvements to the Licensed Premises. The Licensed Premises shall be used in compliance with all laws, orders, judgments, ordinances, regulations, codes, directives, permits, licenses, covenants and restrictions now or hereafter applicable to the Project ("**Legal Requirements**"). After reasonable notice to Licensee which may be verbal or via email (except in the event of an emergency in which case no notice shall be required), Licensor hereby reserves the right to enter the Licensed Premises at all reasonable times for any purpose Licensor deems to be necessary or appropriate in connection with the maintenance, repair, operation, sale or leasing of the Project.

During the Term, Licensee shall have the right to use the furniture, fixtures and equipment belonging to Licensor located within the Licensed Premises on the Commencement Date ("**Licensor's Furniture**") at no additional cost. Licensee shall have no right to remove any of Licensor's Furniture from the Licensed Premises without Licensor's prior written consent and Licensor's Furniture shall be returned to Licensor at the expiration or earlier termination of the Term in substantially the same condition as received by Licensee, except for ordinary wear and tear and casualty.

At the expiration or earlier termination of the Term, Licensee shall remove all of Licensee's personal property from the Licensed Premises, and Licensee shall restore and repair any damage caused by or occasioned as a result of such removal.

5. Hazardous Materials. Licensee shall not cause or permit any Hazardous Materials (as hereinafter defined) to be brought upon, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Licensed Premises or the Project in violation of applicable Legal Requirements. If Licensee breaches the obligation stated in the preceding sentence, or if the presence of Hazardous Materials in the Licensed Premises during the Term or any holding over results in contamination of the Licensed Premises, the Project or any adjacent property or if contamination of the Licensed Premises, the Project or any adjacent property by Hazardous Materials brought into, kept, used, stored, handled, treated, generated in or about, or released or disposed of from, the Licensed Premises occurs during the Term or any holding over by Licensee or by anyone other than Licensor and Licensor's employees, agents and contractors, Licensee hereby indemnifies and shall defend and hold Licensor, its officers, directors, employees, agents and contractors harmless from any and all actions (including, without limitation, remedial or enforcement actions of any kind, administrative or judicial proceedings, and orders or judgments arising out of or resulting therefrom), costs, claims, damages (including, without limitation, punitive damages and damages based upon diminution in value of the Licensed Premises or the Project, or the loss of, or restriction on, use of the Licensed Premises or any portion of the Project), expenses (including, without limitation, attorneys', consultants' and experts' fees, court costs and amounts paid in settlement of any claims or actions), fines, forfeitures or other civil, administrative or criminal penalties, injunctive or other relief (whether or not based upon personal injury, property damage, or contamination of, or adverse effects upon, the environment, water tables or natural resources), liabilities or losses which arise during or after the Term as a result of such contamination. This indemnification of Licensor by Licensee includes, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, treatment, remedial, removal, or restoration work required



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by any federal, state or local governmental authority because of Hazardous Materials present in the air, soil or ground water above, on, or under the Licensed Premises. Without limiting the foregoing, if the presence of any Hazardous Materials on the Licensed Premises, the Project or any adjacent property caused or permitted by Licensee or any Licensee Related Party results in any contamination of the Licensed Premises, the Project or any adjacent property, Licensee shall promptly take all actions at its sole expense and in accordance with applicable Environmental Requirements as are necessary to return the Licensed Premises, the Project or any adjacent property to the condition existing prior to the time of such contamination, provided that Licensors approval of such action shall first be obtained, which approval shall not unreasonably be withheld so long as such actions would not potentially have any material adverse long-term or short-term effect on the Licensed Premises or the Project. The term “**Environmental Requirements**” shall mean all applicable present and future statutes, regulations, ordinances, rules, codes, judgments, orders or other similar enactments of any governmental authority regulating or relating to health, safety, or environmental conditions on, under, or about the Licensed Premises or the Project, or the environment, including without limitation, the following: the Comprehensive Environmental Response, Compensation and Liability Act; the Resource Conservation and Recovery Act; and all state and local counterparts thereto, and any regulations or policies promulgated or issued thereunder. The term “**Hazardous Materials**” shall mean any flammable material, explosives, radioactive materials, petroleum products, hazardous or toxic substances, or any waste or related materials, including without limitation anything included in the definition of “hazardous substances”, “hazardous materials”, “hazardous wastes”, or “toxic substances” under any applicable federal, state or local law or regulation. If Licensee or any Licensee Related Party in any way causes or knowingly permits contamination of the Licensed Premises or the Project with Hazardous Materials, Licensee shall notify Licensors, and Licensors may terminate the license immediately. Licensee hereby indemnifies Licensors, and agrees to defend and hold Licensors harmless, from and against all claims of any type arising from or in connection with contamination of the Licensed Premises or the Project by Hazardous Materials caused by Licensee or any Licensee Related Party or by Licensees use of this license. Notwithstanding anything to the contrary contained in this Section 5 or Section 6, Licensee shall not be responsible for, and the indemnification and hold harmless obligation set forth in this paragraph shall not apply to (i) contamination in the Licensed Premises which Licensee can prove to Licensors reasonable satisfaction existed in the Licensed Premises immediately prior to Licensees occupancy of the Licensed Premises, or (ii) the presence of any Hazardous Materials in the Licensed Premises which Licensee can prove to Licensors reasonable satisfaction migrated from outside of the Licensed Premises into the Licensed Premises or Project, unless in either case, the presence of such Hazardous Materials (x) is the result of a breach by Licensee of any of its obligations under this Agreement, or (y) was caused, contributed to or exacerbated by Licensee or any Licensee Related Party.

As a material inducement to Licensors to allow Licensee to use Hazardous Materials in connection with its business in the Licensed Premises, Licensee agrees to deliver to Licensors prior to the License Commencement Date a list identifying each type of Hazardous Materials (other than products customarily used by tenants in de minimus quantities for ordinary cleaning and office purposes) to be brought upon, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Licensed Premises and setting forth any and all governmental approvals or permits required in connection with the presence, use, storage, handling, treatment, generation, release or disposal of such Hazardous Materials on or from the Licensed Premises (“**Hazardous Materials List**”). Licensee shall deliver to Licensors an updated list before any new Hazardous Material is brought onto, kept, used, stored, handled, treated, generated on, or released or disposed of from, the Licensed Premises. Licensee shall deliver to Licensors true and correct copies of the following documents (the “**Haz Mat Documents**”) relating to the use, storage, handling, treatment, generation, release or disposal of Hazardous Materials prior to the License Commencement Date, or if unavailable at that time, concurrent with the receipt from or submission to a governmental authority: permits; approvals; reports and correspondence; storage and management plans, notice of violations of any Legal Requirements. Licensee is not required, however, to provide Licensors with any portion(s) of the Haz Mat Documents containing information of a proprietary nature which, in and of themselves, do not contain a reference to any Hazardous Materials or hazardous activities. Notwithstanding anything to the contrary contained herein, Licensors acknowledges that, prior to the date of this Agreement, Licensee delivered to Licensors the Hazardous Materials List required above.



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Licensee shall have the exclusive use of 100% of the control areas in the Building. For the avoidance of doubt, Licensee shall not have rights with respect to any other control areas at the Project.

The provisions of this Section 5 shall survive the expiration or earlier termination of this Agreement.

6. Surrender. Upon the expiration of the Term or earlier termination of Licensee's right of possession, Licensee shall surrender the Licensed Premises to Licensors in the same condition as received, ordinary wear and tear and casualty loss and condemnation excepted, free of Hazardous Materials brought upon, kept, used, stored, handled, treated, generated in, or released or disposed of from, the Licensed Premises by any person other than Licensors, its officers, directors, employees, managers, agents, invitees and contractors (collectively, "**Licensee HazMat Operations**") and released of all Hazardous Materials clearances. No later than the date that is 30 days prior to the surrender of the Licensed Premises, Licensee shall deliver to Licensors a narrative description of the actions proposed (or required by any governmental authority) to be taken by Licensee in order to surrender the Licensed Premises at the expiration or earlier termination of the Term, free from any residual impact from the Licensee HazMat Operations and otherwise released for unrestricted use and occupancy (the "**Decommissioning and HazMat Closure Plan**"). Such Decommissioning and HazMat Closure Plan shall be accompanied by a current listing of (i) all Hazardous Materials licenses and permits held by or on behalf of Licensee with respect to the Licensed Premises, and (ii) all Hazardous Materials used, stored, handled, treated, generated, released or disposed of from the Licensed Premises, and shall be subject to the review and approval of Licensors's environmental consultant. In connection with the review and approval of the Decommissioning and HazMat Closure Plan, upon the request of Licensors, Licensee shall deliver to Licensors or its consultant such additional non-proprietary information concerning Licensee HazMat Operations as Licensors shall request. On or before such surrender, Licensee shall deliver to Licensors evidence that the approved Decommissioning and HazMat Closure Plan shall have been satisfactorily completed and Licensors shall have the right, at its sole expense, to cause Licensors's environmental consultant to inspect the Licensed Premises and perform such additional procedures as may be deemed reasonably necessary to confirm that the Licensed Premises are, as of the effective date of such surrender or early termination of this Agreement, free from any residual impact from Licensee HazMat Operations. Licensors shall have the unrestricted right to deliver such Decommissioning and HazMat Closure Plan and any report by Licensors's environmental consultant with respect to the surrender of the Licensed Premises to third parties.

If Licensee shall fail to prepare or submit a Decommissioning and HazMat Closure Plan approved by Licensors, or if Licensee shall fail to complete the approved Decommissioning and HazMat Closure Plan, or if such Decommissioning and HazMat Closure Plan, whether or not approved by Licensors, shall fail to adequately address any residual effect of Licensee HazMat Operations in, on or about the Licensed Premises, Licensors shall have the right to take such actions as Licensors may deem reasonable or appropriate to assure that the Licensed Premises and the Project are surrendered free from any residual impact from Licensee HazMat Operations, the cost of which actions shall be reimbursed by Licensee without regard to the limitation set forth in the first paragraph of this Section 6.

Licensee shall be responsible for reimbursing Licensors for all reasonable costs expended by Licensors in repairing damage to the Licensed Premises or the Project caused by Licensee or any of its Related Parties.

The provisions of this Section 6 shall survive the expiration or earlier termination of this Agreement.



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7. Termination. "Cause" for termination of this Agreement shall exist if Licensee fails to comply with any of the terms or provisions of this Agreement (other than the provisions requiring the payment of fees or other sums), and fails to cure such default within 10 business days after the date of receipt of written notice of default from Licensor.

8. License Fees. Pursuant to the terms of this Section 8, Licensee shall pay a license fee ("**License Fee**") to Licensor in the amount of \$3.00 per rentable square foot of the Licensed Premises per month. Notwithstanding the foregoing, subject to the terms of the immediately following paragraph, for the period commencing on the License Commencement Date through the expiration or earlier termination of the Term, Licensee shall not be required to pay the License Fee under this Agreement (the "**Abatement**").

Licensee acknowledges and agrees that if either (i) Licensee defaults (beyond all applicable notice and cure periods) under this Agreement, or (ii) except as set forth in the last sentence of this paragraph, the Morehouse Lease terminates such that the Commencement Date (as defined in the Morehouse Lease) of the Morehouse Lease never occurs (either of the foregoing, a "**Payment Trigger Date**"), then (a) within 10 days after the Payment Trigger Date, Licensee shall deliver to Licensor an amount equal to the sum of (x) all of the of the License Fees that would have been due and payable for the period commencing on the License Commencement Date through the day immediately preceding the Payment Trigger Date but for the Abatement provided for in the immediately preceding paragraph, and (y) commencing on the Payment Trigger Date through the expiration date of the Term, Licensee shall pay the full amount of the License Fee provided for above for each month during the Term. Notwithstanding the foregoing, if the Morehouse Lease terminates solely as a result of Morehouse Landlord's failure to timely deliver the Initial Premises (as defined in the Morehouse Lease) as required under the Morehouse Lease (subject to Force Majeure, delays caused by Licensee and any default by Licensee, as "Tenant," under the Morehouse Lease), then Licensee shall not be required to pay the retroactive Licensee Fee pursuant to sub-section (x) above as a result of such termination.

9. Operating Expenses. Commencing on the License Commencement Date, and continuing thereafter on the first day of each month of the Term, Licensee shall pay Licensor an amount equal to 1/12 of Licensee's Share of Licensor's written estimate of Operating Expenses for the Project for each calendar year during the Term. Licensee's Share of Operating Expenses with respect to the Licensed Premises is 100%. The Building's Share of Operating Expenses of Project is 28.01%. The term "**Operating Expenses**" means all costs and expenses of any kind or description whatsoever incurred or accrued each calendar year by Licensor with respect to the Project, including but not limited to utilities, janitorial services for the common areas of the Project, taxes and insurance, capital repairs and improvements amortized over the useful life of such capital repairs and improvements (as reasonably determined by Licensor taking account all relevant factors including, without limitation, the 24x7 operation of the Building, and an administrative fee in the amount of \$1,076.40 per month. Licensee will be responsible for obtaining and paying for its janitorial services for the Licensed Premises and for paying directly to the applicable utility provider separately metered utilities provided to Licensee or the Licensed Premises.

Within a reasonable period after the expiration or earlier termination of this Agreement, Licensor shall furnish to Licensee a statement (a "**Reconciliation Statement**") showing in reasonable detail: (a) the total and Licensee's share of actual Operating Expenses for the Term of the license, and (b) the total of Licensee's payments in respect of Operating Expenses for the Term of this Agreement. If Licensee's share of actual Operating Expenses exceeds Licensee's payments of Operating Expenses, the excess shall be due and payable by Licensee within 10 business days after delivery of such Reconciliation Statement to Licensee. If Licensee's payments of Operating Expenses exceed Licensee's share of actual Operating Expenses, Licensor shall pay the excess to Licensee within 10 business days after delivery of such Reconciliation Statement to Licensee, except that after the expiration, or earlier termination of the Term, Licensor shall pay the excess to Licensee after deducting all other amounts due Licensor.



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Payments required to be made to Licensor pursuant to this Agreement shall be remitted to Licensor at the address set forth below (as the same may be changed from time to time by Licensor upon written notice from Licensor to Licensee):

Alexandria Real Estate Equities, Inc.
Dept LA 23447
Pasadena, CA 91185-3447

10. Utilities. Licensor shall provide, subject to the terms of this Section 10, water, electricity, HVAC, light, power, sewer, and other utilities (including gas and fire sprinklers to the extent the Building is plumbed for such services), and with respect to the common areas of the Project only, refuse and trash collection and janitorial services. No interruption or failure of utilities, from any cause whatsoever shall result in eviction or constructive eviction of Licensee, termination of this Agreement or the abatement of License Fees. Licensee will be responsible for paying for any separately metered utilities provided to Licensee and for obtaining and paying for its janitorial services for the Licensed Premises.

11. Parking. Subject to all matters of record, Force Majeure (as defined in Section 26), a taking and the exercise by Licensor of its rights hereunder, Licensee shall have the right at no additional cost to Licensee, in common with other tenants and occupants of the Project, to use 2.9 parking spaces per 1,000 rentable square feet of the Licensed Premises, which parking spaces shall be located in those areas designated for non-reserved parking, subject in each case to Licensor's rules and regulations. Licensor may allocate parking spaces among Licensee and other tenants in the Project pro rata as described above if Licensor determines that such parking facilities are becoming crowded. Licensor shall not be responsible for enforcing Licensee's parking rights against any third parties, including other tenants of the Project.

12. Maintenance. Licensor shall maintain, as part of Operating Expenses, all of the structural, exterior, parking and other common areas of the Project, and the Building systems reflected on **Exhibit B** as being allocated to Licensor, in good repair, reasonable wear and tear and uninsured losses and damages caused by Licensee or any Licensee Related Party excluded, in which case Licensee shall be responsible.

Subject to the terms of the immediately preceding paragraph, as of the License Commencement Date, the maintenance and repair obligations for the Licensed Premises shall be allocated between Licensor and Licensee as set forth on **Exhibit B** attached hereto. The maintenance obligations allocated to Licensee pursuant to **Exhibit B** (the "**Licensee Maintenance Obligations**") shall be performed by Licensee at Licensee's sole cost and expense. The Licensee Maintenance Obligations shall include the procurement and maintenance of contracts, in form and substance reasonably satisfactory to Licensor, with copies to Licensor upon Licensor's written request, for and with contractors reasonably acceptable to Licensor specializing and experienced in the respective Licensee Maintenance Obligations. Notwithstanding anything to the contrary contained herein, the scope of work of any such contracts entered into by Licensee pursuant to this paragraph shall, at a minimum, comply with manufacturer's recommended maintenance procedures for the optimal performance of the applicable equipment. Licensor shall, notwithstanding anything to the contrary contained in this Agreement, have no obligation to perform any Licensee Maintenance Obligations. The Licensee Maintenance Obligations shall not include the right or obligation on the part of Licensee to make any structural and/or capital repairs or improvements to the Project, and Licensor shall, during any period that Licensee is responsible for the Licensee Maintenance Obligations, continue to be responsible for capital repairs and replacements required to be made to the Project. If Licensee fails to maintain any portion of the Licensed Premises for which Licensee is responsible as part of the Licensee Maintenance Obligations in a manner reasonably acceptable to Licensor within the requirements of this Agreement, Licensor shall have the right, but not the obligation, to provide Licensee with written notice thereof and to assume the Licensee Maintenance Obligations if Licensee does not cure Licensee's failure within 10 days after receipt of such notice in which case Licensee shall be required, within 10 days after demand from Licensor, to pay or reimburse Licensor, as the case may be, for all costs incurred or to be incurred by Licensor in connection with performing any Licensee Maintenance Obligations.



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13. Signage. Licensee shall not, without the prior written consent of Licensor, which may be granted or withheld in Licensor's sole discretion: (i) attach any awnings, exterior lights, decorations, balloons, flags, pennants, banners, painting or other projection to any outside wall of the Project, (ii) use any curtains, blinds, shades or screens other than Licensor's standard window coverings, (iii) coat or otherwise sunscreen the interior or exterior of any windows, (iv) place any bottles, parcels, or other articles on the window sills, (v) place any equipment, furniture or other items of personal property on any exterior balcony, or (vi) paint, affix or exhibit on any part of the Licensed Premises or the Project any signs, notices, window or door lettering, placards, decorations, or advertising media of any type which can be viewed from the exterior of the Licensed Premises. Licensee's name and/or logo on the directory tablet shall be inscribed, painted or affixed for Licensee by Licensor at the sole cost and expense of Licensee, and shall be of a size, color and type acceptable to Licensor. Nothing may be placed on the exterior of corridor walls or corridor doors other than Licensor's standard lettering. The directory tablet shall be provided exclusively for the display of the name and location of tenants/licensees.

Licensee shall have the exclusive right to display, at Licensee's cost and expense, a Building-top sign bearing Licensee's name and/or logo in a location on the Building designated by Licensor (the "**Building Sign**"). Notwithstanding the foregoing, Licensee acknowledges and agrees that Licensee's signage on the Building Sign including, without limitation, the size, color and type, shall be subject to Licensor's prior written approval, which shall not be unreasonably withheld, and shall be consistent with Licensor's signage program at the Project and applicable Legal Requirements. Licensee shall be responsible, at Licensee's sole cost and expense, for the design, permits, fabrication, installation, and maintenance of Licensee's signage on the Building Sign; for the removal of Licensee's signage on the Building Sign at the expiration or earlier termination of this Lease; and for the repair of all damage resulting from such removal.

14. Limitation on Licensor's Liability. NOTWITHSTANDING ANYTHING SET FORTH HEREIN OR IN ANY OTHER AGREEMENT BETWEEN LICENSOR AND LICENSEE TO THE CONTRARY: (A) LICENSOR SHALL NOT BE LIABLE TO LICENSEE OR ANY OTHER PERSON FOR (AND LICENSEE AND EACH SUCH OTHER PERSON ASSUME ALL RISK OF) LOSS, DAMAGE OR INJURY, WHETHER ACTUAL OR CONSEQUENTIAL TO: LICENSEE'S PERSONAL PROPERTY OF EVERY KIND AND DESCRIPTION, INCLUDING, WITHOUT LIMITATION TRADE FIXTURES, EQUIPMENT, INVENTORY, PRODUCT, AND/OR BUSINESS, ACCOUNTING AND OTHER RECORDS OF EVERY KIND AND DESCRIPTION KEPT AT THE LICENSED PREMISES AND ANY AND ALL INCOME DERIVED OR DERIVABLE THEREFROM; (B) THERE SHALL BE NO PERSONAL RECOURSE TO LICENSOR FOR ANY ACT OR OCCURRENCE IN, ON OR ABOUT THE LICENSED PREMISES OR ARISING IN ANY WAY UNDER THIS AGREEMENT OR ANY OTHER AGREEMENT BETWEEN LICENSOR AND LICENSEE WITH RESPECT TO THE SUBJECT MATTER HEREOF AND ANY LIABILITY OF LICENSOR HEREUNDER SHALL BE STRICTLY LIMITED SOLELY TO LICENSOR'S INTEREST IN THE PROJECT OR ANY PROCEEDS FROM SALE OR CONDEMNATION THEREOF AND ANY INSURANCE PROCEEDS PAYABLE IN RESPECT OF LICENSOR'S INTEREST IN THE PROJECT OR IN CONNECTION WITH ANY SUCH LOSS; AND (C) IN NO EVENT SHALL ANY PERSONAL LIABILITY BE ASSERTED AGAINST LICENSOR IN CONNECTION WITH THIS AGREEMENT NOR SHALL ANY RECOURSE BE HAD TO ANY OTHER PROPERTY OR ASSETS OF LICENSOR OR ANY OF LICENSOR'S OFFICERS, DIRECTORS, EMPLOYEES OR AGENTS. UNDER NO CIRCUMSTANCES SHALL LICENSOR OR ANY OF LICENSOR'S OFFICERS, DIRECTORS, EMPLOYEES OR AGENTS BE LIABLE FOR INJURY TO LICENSEE'S BUSINESS OR FOR ANY LOSS OF INCOME OR PROFIT THEREFROM.

15. Assignment. Licensee may not assign or otherwise transfer all or any part of its interest in this Agreement or in the Licensed Premises.



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16. Governing Jurisdiction. This Agreement shall be construed under and in accordance with the laws of the State of California.

17. Notice. Any notice required to be given under this Agreement may be personally delivered to a party, or may be sent by overnight courier service (e.g., Federal Express), or by facsimile transmission with a confirming copy sent by overnight courier service, to either party addressed as follows:

To Licensee: Artiva Biotherapeutics, Inc.
 4025 Sorrento Valley Road
 San Diego, CA 92121
 Attn: Lease Administrator

To Licensors: c/o Alexandria Real Estate Equities, Inc.
 26 North Euclid Avenue
 Pasadena, CA 91101
 Attn: Corporate Secretary
 Re: 4025 Sorrento Valley Road

18. Estoppel Certificate. Licensee shall, within 10 business days of written notice from Licensors, execute, acknowledge and deliver a statement in writing in any form reasonably requested by a proposed lender or purchaser, (i) certifying that this Agreement is unmodified and in full force and effect (or, if modified, stating the nature of such modification and certifying that this Agreement as so modified is in full force and effect) and the dates to which the rental and other charges are paid in advance, if any, (ii) acknowledging that there are not any uncured defaults on the part of Licensors hereunder, or specifying such defaults if any are claimed, and (iii) setting forth such further information with respect to the status of this Agreement or the Licensed Premises as may be requested thereon. Any such statement may be relied upon by any prospective purchaser or encumbrancer of all or any portion of the real property of which the Licensed Premises are a part. Licensee's failure to deliver such statement within such time shall, at the option of Licensors, constitute a default under this Agreement, and, in any event, shall be conclusive upon Licensee that this Agreement is in full force and effect and without modification except as may be represented by Licensors in any certificate prepared by Licensors and delivered to Licensee for execution.

19. Financial Information. Licensee shall furnish to Licensors with true and complete copies of (i) upon Licensors's written request on an annual basis, Licensee's most recent audited annual financial statements until available from Licensee's auditing firm, (ii) upon Licensors's written request on a quarterly basis, Licensee's most recent unaudited quarterly financial statements; provided, however, that Licensee shall not be required to deliver to Licensors such quarterly financial statements for any particular quarter sooner than the date that is 90 days after the end of each of Licensee's fiscal quarters during the Term, (iii) upon Licensors's written request from time to time, corporate brochures and/or profiles prepared by Licensee for prospective investors, and (iv) upon Licensors's written request from time to time, any other financial information or summaries that Licensee typically provides to its lenders or shareholders. Notwithstanding anything to the contrary contained in this Lease, Licensors's written request for financial information pursuant to this Section 19 may be delivered to Licensee via email. Notwithstanding the foregoing, Licensee shall not be required to provide such financial statements to Licensors if Licensee is subject to a quiet period prior to a public offering, as required by applicable U.S. securities laws or regulations. So long as Licensee is a "public company" and its financial information is publicly available, then the foregoing delivery requirements of this Section 19 shall not apply.

Licensors agrees to hold the financial statements and other financial information provided under this section in confidence using at least the same degree of care that Licensors uses to protect its own confidential information of a similar nature; provided, however, that Licensors may disclose such information to Licensors's auditors, attorneys, consultants, lenders, affiliates, prospective purchasers and



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investors and other third parties as reasonably required in the ordinary course of Licensor's operations, provided that Licensor shall deliver written notice to such parties requiring them to treat the information as confidential. The obligations of confidentiality hereunder shall not apply to information that was in the public domain at the time it was disclosed to Licensor, entered into the public domain subsequent to the time it was disclosed to Licensor through no fault of Licensor, or was disclosed by Licensee to a third party without any confidentiality restrictions. In addition, Licensor may disclose such information without violating this section to the extent that disclosure is reasonably necessary (x) for Licensor to enforce its rights or defend itself under this Lease; (y) for required submissions to any state or federal regulatory body; or (z) for compliance with a valid order of a court or other governmental body having jurisdiction, or any law, statute, or regulation, provided that, other than in an emergency, before disclosing such information, Licensor shall give Licensee prior notice of the same promptly upon becoming aware of the need for disclosure but in no event less than 10 business days prior to such disclosure, in order to allow Licensee to obtain a protective order or such other judicial relief.

20. OFAC. Licensee, and all beneficial owners of Licensee, are currently (a) in compliance with and shall at all times during the Term of this Agreement remain in compliance with the regulations of the Office of Foreign Assets Control ("OFAC") of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the "OFAC Rules"), (b) not listed on, and shall not during the term of this Agreement be listed on, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List, or the Sectoral Sanctions Identification List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

21. Miscellaneous. Any modification of this Agreement must be in writing signed by both Licensor and Licensee. If any provision of this Agreement is made unenforceable, such shall not affect the enforceability of any other provision. If any action is brought by either party against the other, the prevailing party shall be entitled to recover reasonable attorney's fees. This Agreement shall be binding on and inure to the benefit of the successors and permitted assigns of the respective parties. If any clause or provision of this Agreement is illegal, invalid or unenforceable under present or future laws, then and in that event, it is the intention of the parties hereto that the remainder of this Agreement shall not be affected thereby.

22. Brokers. Licensor and Licensee each represents and warrants that it has not dealt with any broker, agent or other person (collectively, "Broker") in connection with this transaction and that no Broker brought about this transaction, other than Hughes Marino, Cushman & Wakefield and CBRE. Licensor and Licensee each hereby agree to indemnify and hold the other harmless from and against any claims by any Broker, other than Hughes Marino, Cushman & Wakefield and CBRE, claiming a commission or other form of compensation by virtue of having dealt with Licensee or Licensor, as applicable, with regard to transaction contemplated by this Agreement.

23. Rules and Regulations. Licensee shall, at all times during the Term, comply with all reasonable rules and regulations at any time or from time to time established by Licensor covering use of the Licensed Premises and the Project. If there is any conflict between said rules and regulations and other provisions of this Agreement, the terms and provisions of this Agreement shall control. Licensor shall not have any liability or obligation for the breach of any rules or regulations by other tenants or other licensees at the Project and shall not enforce such rules and regulations in a discriminatory manner.

24. California Accessibility Disclosure. For purposes of Section 1938(a) of the California Civil Code, Licensor hereby discloses to Licensee, and Licensee hereby acknowledges, that the Project has not undergone inspection by a Certified Access Specialist (CAsp). In addition, the following notice is hereby provided pursuant to Section 1938(e) of the California Civil Code: "A Certified Access Specialist (CAsp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not



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require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises.” In furtherance of and in connection with such notice: (i) Licensee, having read such notice and understanding Licensee’s right to request and obtain a CASp inspection, hereby elects not to obtain such CASp inspection and forever waives its rights to obtain a CASp inspection with respect to the Licensed Premises, Building and/or Project to the extent permitted by Legal Requirements; and (ii) if the waiver set forth in clause (i) hereinabove is not enforceable pursuant to Legal Requirements, then Licensor and Licensee hereby agree as follows (which constitute the mutual agreement of the parties as to the matters described in the last sentence of the foregoing notice): (A) Licensee shall have the one-time right to request for and obtain a CASp inspection, which request must be made, if at all, in a written notice delivered by Licensee to Licensor; (B) any CASp inspection timely requested by Licensee shall be conducted (1) at a time mutually agreed to by Licensor and Licensee, (2) in a professional manner by a CASp designated by Licensor and without any testing that would damage the Licensed Premises, Building or Project in any way, and (3) at Licensee’s sole cost and expense, including, without limitation, Licensee’s payment of the fee for such CASp inspection, the fee for any reports prepared by the CASp in connection with such CASp inspection (collectively, the “CASp Reports”) and all other costs and expenses in connection therewith; (C) the CASp Reports shall be delivered by the CASp simultaneously to Licensor and Licensee; (D) Licensee, at its sole cost and expense, shall be responsible for making any improvements, alterations, modifications and/or repairs to or within the Licensed Premises to correct violations of construction-related accessibility standards including, without limitation, any violations disclosed by such CASp inspection; and (E) if such CASp inspection identifies any improvements, alterations, modifications and/or repairs necessary to correct violations of construction-related accessibility standards relating to those items of the Building and Project located outside the Licensed Premises that are Licensor’s obligation to repair as set forth in the Lease, then Licensor shall perform such improvements, alterations, modifications and/or repairs as and to the extent required by Legal Requirements to correct such violations, and Licensee shall reimburse Licensor for the cost of such improvements, alterations, modifications and/or repairs within 10 business days after Licensee’s receipt of an invoice therefor from Licensor.

25. Counterparts. This Agreement may be executed in 2 or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature process complying with the U.S. federal ESIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this Agreement and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.

26. Force Majeure. Except for the payment of License Fees, Operating Expenses and any other amounts due hereunder, neither Licensor nor Licensee shall be responsible or liable for delays in the performance of its obligations hereunder when caused by, related to, or arising out of acts of God, sinkholes or subsidence, strikes, lockouts, or other labor disputes, embargoes, quarantines, weather, national, regional, or local disasters, calamities, or catastrophes, inability to obtain labor or materials (or reasonable substitutes therefor) at reasonable costs or failure of, or inability to obtain, utilities necessary for performance, governmental restrictions, orders, limitations, regulations, or controls, national emergencies, local, regional or national epidemic or pandemic, delay in issuance or revocation of permits, enemy or hostile governmental action, terrorism, insurrection, riots, civil disturbance or commotion, fire or other casualty, and other causes or events beyond their reasonable control (“**Force Majeure**”).

27. Holding Over. Notwithstanding anything to the contrary contained herein, if Licensee remains in possession of the Licensed Premises after the expiration or earlier termination of the Term



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without the express written consent of Licensor, (a) Licensee shall become a tenant at sufferance upon the terms of this Agreement except that (i) for the first 30 days of such holdover, the monthly rental shall be equal to \$53,820.00 per month plus Operating Expenses, and (ii) thereafter, the monthly rental shall be equal to \$71,760.00 per month plus Operating Expenses, and (b) Licensee shall be responsible for all damages suffered by Licensor resulting from or occasioned by Licensee's holding over, including consequential damages.

[Signatures are on the next page]



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IN WITNESS WHEREOF, the parties have caused their duly authorized representatives to execute this Agreement as of the date first written above.

LICENSEE:

ARTIVA BIOTHERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Fred Aslan

Its: CEO

☒ I hereby certify that the signature, name, and title above are my signature, name and title.

LICENSOR:

ARE-SD REGION NO. 37, LLC,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

By: /s/ Gary Dean

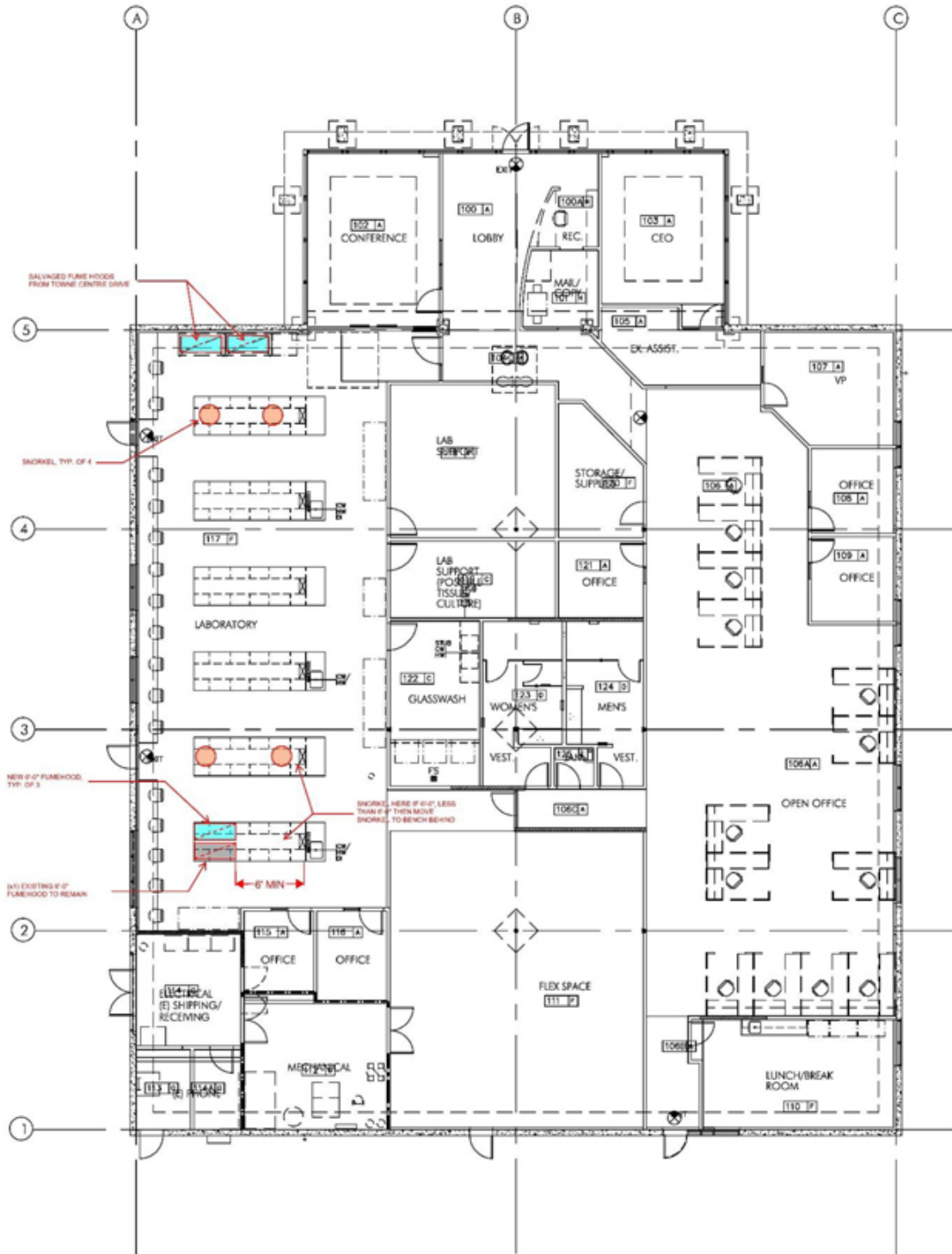
Its: Executive Vice President – Real Estate Legal
Affairs



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EXHIBIT A

Licensed Premises



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EXHIBIT B
Licensee Maintenance Obligations

Multi-Tenant Maintenance Responsibilities
4025 Sorrento Valley Boulevard
Artiva

Maintenance Responsibilities: Multi-Tenant

	Artiva	ARE
Utilities		
Water - domestic		✓
Water - irrigation		✓
Gas - tenant premises	✓	
Gas - common area		✓
Electric - tenant premises	✓	
Electric - common area		✓
Exterior / Site		
Landscaping		✓
Pest control - exterior		✓
Parking lot sweeping		✓
Project security (nightly rounds)		✓
Parking lot lighting		✓
Exterior monument and footpath lighting		✓
Landscape irrigation		✓
Exterior window washing		✓
Roof inspections		✓
Domestic backflow preventer certification - Industrial / Domestic		✓
Domestic backflow preventer certification - Fire		✓
Building Interior and Systems		
Cold rooms (if applicable)	✓	
Autoclaves (if applicable)	✓	
Glassware washers	✓	
RO/DI laboratory water systems	✓	
Air compressors	✓	
Vacuum pumps	✓	
Laboratory gas distribution systems	✓	
Emergency eyewash and shower stations	✓	
Internal UPS units (if applicable)	✓	
Fire extinguisher inspection / certification - common area		N/A
Fire extinguisher inspection / certification - tenant premises	✓	
Fire sprinkler system		✓
Fire alarm system (and phone lines)		✓
Building HVAC equipment		✓
Smoke fire dampers		✓
Security alarm - tenant premises (if applicable)	✓	
Security cameras - common area (if applicable)		✓
Security cameras - tenant premises (if applicable)	✓	
Access controls - common area		N/A
Access controls - tenant premises	✓	
Janitorial - common area		✓
Janitorial - tenant premises	✓	
I/R Testing of electrical systems		✓
Emergency generator (if applicable)	✓	
Building Management Systems (BMS)		✓
Environmental monitoring	✓	
Trash/Recycling Removal		✓



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FIRST AMENDMENT TO LICENSE AGREEMENT

THIS FIRST AMENDMENT TO LICENSE AGREEMENT (this “**First Amendment**”) is made as of May 9, 2022, by and between **ARE-SD REGION NO. 37, LLC**, a Delaware limited liability company (“**Licensor**”), and **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Licensee**”).

RECITALS

A. Licensor and Licensee are now parties to that certain License Agreement dated as of June 16, 2021 (the “**License Agreement**”). Pursuant to the License Agreement, Licensee has a temporary license to use that certain premises containing approximately 11,960 rentable square feet of space (the “**Licensed Premises**”) which consists of the entire building located at 4025 Sorrento Valley Road, San Diego, California (the “**Building**”). The Licensed Premises are more particularly described in the License Agreement. Capitalized terms used herein without definition shall have the meanings defined for such terms in the License Agreement.

B. Licensor and Licensee desire, subject to the terms and conditions set forth below, to amend the License Agreement as set forth herein.

NOW, THEREFORE, in consideration of the foregoing Recitals, which are incorporated herein by this reference, the mutual promises and conditions contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Licensor and Licensee hereby agree as follows:

1. **Term.** The first paragraph of Section 1 of the License Agreement is hereby deleted in its entirety and replaced with the following:
 “Licensor hereby grants to Licensee a license to enter into and use the Licensed Premises for the use described below commencing on the date that is 1 business day after the mutual execution and delivery of this Agreement by the parties (the “**License Commencement Date**”). Licensor shall deliver the Licensed Premises to Licensee on the License Commencement Date. The term (the “**Term**”) of the license granted pursuant to this Section 1 shall expire on the earlier of (a) the date that is 30 days after the Commencement Date (as defined in the Morehouse Lease) of the Morehouse Lease, or (b) the termination of this Agreement for Cause (as defined in Section 7); provided, however, that if the Morehouse Lease terminates such that the Commencement Date (as defined in the Morehouse Lease) of the Morehouse Lease never occurs, then this Agreement shall terminate on June 20, 2022.”
2. **Brokers.** Licensor and Licensee each represents and warrants that it has not dealt with any broker, agent or other person (collectively, “**Broker**”) in connection with the transaction reflected in this First Amendment and that no Broker brought about this transaction. Licensor and Licensee each hereby agrees to indemnify and hold the other harmless from and against any claims by any Broker claiming a commission or other form of compensation by virtue of having dealt with Licensee or Licensor, as applicable, with regard to this leasing transaction.
3. **OFAC.** Licensee and all beneficial owners of Licensee are currently (a) in compliance with and shall at all times during the Term of the License Agreement remain in compliance with the regulations of the Office of Foreign Assets Control (“**OFAC**”) of the U.S. Department of Treasury and any statute, executive order, or regulation relating thereto (collectively, the “**OFAC Rules**”), (b) not listed on, and shall not during the term of the License Agreement be listed on, the Specially Designated Nationals and Blocked Persons List, Foreign Sanctions Evaders List or the Sectoral Sanctions Identifications List, which are all maintained by OFAC and/or on any other similar list maintained by OFAC or other governmental authority pursuant to any authorizing statute, executive order, or regulation, and (c) not a person or entity with whom a U.S. person is prohibited from conducting business under the OFAC Rules.

4. Miscellaneous.

- a.** This First Amendment is the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior and contemporaneous oral and written agreements and discussions. This First Amendment may be amended only by an agreement in writing, signed by the parties hereto.
- b.** This First Amendment is binding upon and shall inure to the benefit of the parties hereto, and their respective successors and assigns.
- c.** This First Amendment may be executed in two (2) or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature process complying with the U.S. federal ESIGN Act of 2000) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes. Electronic signatures shall be deemed original signatures for purposes of this First Amendment and all matters related thereto, with such electronic signatures having the same legal effect as original signatures.
- d.** Except as amended and/or modified by this First Amendment, the License Agreement is hereby ratified and confirmed and all other terms of the License Agreement shall remain in full force and effect, unaltered and unchanged by this First Amendment. In the event of any conflict between the provisions of this First Amendment and the provisions of the License Agreement, the provisions of this First Amendment shall prevail. Whether or not specifically amended by this First Amendment, all of the terms and provisions of the License Agreement are hereby amended to the extent necessary to give effect to the purpose and intent of this First Amendment.

[Signatures are on the next page.]

IN WITNESS WHEREOF, the parties hereto have executed this First Amendment as of the day and year first above written.

LICENSEE:

ARTIVA BIOTHERAPEUTICS, INC.,
a Delaware corporation

By: /s/ Peter Flynn

Its: COO

☒ I hereby certify that the signature, name, and title above
are my signature, name and title.

LICENSEE:

ARE-SD REGION NO. 37, LLC,
a Delaware limited liability company

By: ALEXANDRIA REAL ESTATE EQUITIES, L.P.,
a Delaware limited partnership, managing member

By: ARE-QRS CORP.,
a Maryland corporation,
general partner

By: /s/ Gary Dean

Its: Executive Vice President – Real Estate Legal
Affairs

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.**

SELECTED PRODUCT LICENSE AGREEMENT (CD5)

THIS SELECTED PRODUCT LICENSE AGREEMENT (the “**Agreement**”) is made and entered into as of December 20, 2022 (the “**Effective Date**”) by and between **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“**Artiva**”), having a place of business at 5505 Morehouse Drive, Suite 100, San Diego, CA 92121, USA, and **GC CELL CORPORATION**, a Korean corporation (“**GCC**” or “**GCLC**”), with its principal place of business at 107, Ihyeon-ro 30 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do, 16924, Republic of Korea. Artiva and GCC are sometimes referred to herein individually as a “**Party**” and collectively as the “**Parties**”.

RECITALS

A. The Parties have previously entered into that certain Option and License Agreement, dated as of September 4, 2019, as amended on June 23, 2020, and February 3, 2022 (as may be further amended, the “**Option Agreement**”), pursuant to which, among other things, GCC has granted to Artiva an exclusive option to obtain an exclusive license under Selected Product Technology to develop, manufacture and commercialize Selected Products in the Field in the Territory (each term as defined in the Option Agreement) (the “**Option**”).

B. Artiva has exercised its Option with respect to the Product in accordance with the terms and conditions of the Option Agreement, and GCC has granted to Artiva the Selected Product License (as defined in the Option Agreement) as to the Product.

C. In accordance with Section 5.3 of the Option Agreement, the Parties desire to enter into this Agreement to set forth additional terms and conditions of the Selected Product License as to the Product.

NOW, THEREFORE, in consideration of the foregoing premises and the mutual promises, covenants and conditions contained in this Agreement, the Parties agree as follows:

1. DEFINITIONS

Capitalized terms used in this Agreement (other than the headings of the Sections or Articles) have the following meanings set forth in this Article 1, or, if not listed in this Article 1, the meanings as designated in the text of this Agreement. Capitalized terms used in this Agreement but not otherwise defined herein shall have such meanings ascribed to them in the Option Agreement.

1.1 “Combination Product” means any combination of the Product with one (1) or more other active ingredients, products or services that is not the Product, where such products are sold either as a fixed dose/unit or as separate doses/units in a single package for a single price.

1.2 “Development Cost Share” means [***] of the sum of the Direct Costs (a) incurred by GCC in relation to Preclinical Studies and the Korean Phase 1a/1b Trial, with no additional mark-up or margin by GCC, and (b) incurred by Artiva in relation to preclinical or clinical studies or activities in order to file a U.S. IND with no additional mark-up or margin by Artiva.

1.3 “Direct Costs” means reasonable and documented direct costs reasonably necessary and identifiable to the performance of the Development Plan, including direct costs paid to consultants, independent contractors and Third Party service providers to the extent allowed under the Development Plan, and direct costs of manufacturing, supplies, equipment and materials and related expenditures for production of the Product. For clarity, “Direct Costs” do not include payments for a Party’s or its Affiliates’ employee salaries, benefits, utilities, travel expenses, general office supplies, insurance, information technology or capital expenditures, any administrative costs in the Parties’ respective territories such as the cost for the IND application fee.

1.4 “Existing Third Party Agreements” means the following Agreements to which GCC is a party with the following Third Parties that relate to NK Cells, Licensed Products or Information or Patents related to NK Cells or Licensed Products: [***].

1.5 “GCC Subsidiary” means any Affiliate of GCC that is directly controlled by GCC, or over which GCC has the power to direct or cause the direction of the management and policies of such entity, whether by the ownership of at least fifty percent (50%) of the voting stock of such entity, or by contract.

1.6 “IND” shall mean an investigational new drug application, clinical trial application, clinical trial exemption, or similar application or submission filed with or submitted to a Regulatory Authority in a jurisdiction that is necessary to commence human clinical trials in such jurisdiction, including any such application filed with the FDA pursuant to 21 C.F.R. Part 312.

1.7 “IND Acceptance” means (a) with respect to an IND for a Product filed with the FDA, either (i) a “may proceed” letter from the FDA in writing in response to a dossier submitted to the FDA; or (ii) expiration of the thirty (30) day period following the date of submission of an IND without receipt of notice from the FDA within such time period that the IND is subject to a clinical hold, whichever event ((i) or (ii)) occurs first, or (b) equivalent authorization to proceed with respect to an IND filed with or submitted to any Regulatory Authority outside the United States.

1.8 “Indication” means a human disease, disorder or medical condition that is [***].

1.9 “Initiation” of a clinical trial means the first dosing of the first subject enrolled in such clinical trial.

1.10 “Net Sales” means, with respect to a given period of time, the gross amount invoiced by Artiva and its Affiliates and Sublicensees (each, a “Selling Party”) to Third Party (other than any Selling Party) purchasers for the sale or distribution of Products in the Territory, less the following deductions and offsets that are actually incurred, allowed, accrued, paid or taken and are allocated with respect to such sale or distribution:

(a) [***];

(b) [***];

(c) [***];

(d) [***];

(e) [***];

(f) [***]; and

(g) [***].

Such amounts shall be determined in accordance with GAAP.

With respect to (c) above, (i) no deductions will be made for commissions paid to individuals whether they be with independent sales agencies or regularly employed by Licensee and on its payroll, or for cost of collections, and (ii) if a Product is distributed at a discounted price that is substantially lower than the customary price charged by Licensee, or distributed for non-cash consideration (whether or not at a discount), Net Sales will be calculated based on the non-discounted amount of the Product charged to an independent Third Party during the same calendar quarter or, in the absence of such sales, on the fair market value of the Product.

Sales of Products by a Selling Party to another Selling Party for resale by such entity to a Third Party (other than a Selling Party) shall not be deemed a sale for purposes of this definition of "Net Sales," *provided* that the subsequent resale is included in the computation of Net Sales. Transfers or dispositions of Products as free promotional samples in commercially reasonable amounts, consistent with prevailing industry standards, and Products used in research, development or regulatory activities, compassionate use, indigent programs, investigator-initiated trials or on a named patient basis shall be disregarded in determining Net Sales.

If any discounts or other deductions or rebates are made in connection with sales of a Product that is bundled or sold together with other products of the Selling Parties, then the discount, deduction or rebate applied to the Product shall be in commercially reasonable amounts and shall not exceed the discount, deduction or rebate applied to any of the other products of the Selling Parties in such arrangement based upon the respective list prices of the Product and such other products prior to applying the discount, unless Artiva provides evidence reasonably satisfactory to GCC that such difference is commercially reasonable and does not unfairly prejudice the Product in favor of such other products.

For Products which are sold as Combination Products, the Net Sales for such Combination Products shall be adjusted by [***].

1.11 "Phase 2 Clinical Trial" means a study of a Product in human patients designed or intended to determine initial efficacy, pharmacological effect or dose range or regimen, as further defined in 21 C.F.R. 312.21(b), as amended from time to time, or the corresponding regulations in any jurisdiction or country other than the United States, or any amended or successor regulations, to permit the design of further clinical trials, including a human clinical trial that is also designed to satisfy the requirements of 21 C.F.R. 312.21(a) (or corresponding foreign regulations) and is subsequently optimized or expanded to satisfy the requirements of 21 C.F.R. 312.21(b) (or corresponding foreign regulations) or otherwise to enable a Pivotal Clinical Trial (e.g., a phase 1/2 trial) but only at the time of Initiation of the optimized or expanded portion of such trial.

1.12 "Pivotal Clinical Trial" means a pivotal study in human patients with a defined dose or a set of defined doses of the Product designed or intended to ascertain efficacy and safety of the Product for the purpose of enabling the preparation and forming the primary basis for submission of a BLA for the Product to the competent Regulatory Authority in a country of the Territory, which may be a Phase 3 study as further defined in 21 C.F.R. 312.21(c), as amended from time to time, or a Phase 2 study as further defined in 21 C.F.R. 312.21(b), as amended from time to time, or in each case defined in the corresponding regulations in any jurisdiction or country other than the United States, or any amended or successor regulations.

1.13 "Product" means the Licensed Product described in [Exhibit 1.13](#) and any Combination Product of such Licensed Product.

1.14 "Product Know-How" means all Information Controlled by GCC or any GCC Subsidiary as of the Effective Date or during the Term that relate specifically to the Product or its manufacture or use (and are not otherwise included in GCC Core Technology). Product Know-How excludes any Additional Joint Inventions.

1.15 “Product Patents” means any Patents in the Territory Controlled by GCC or any GCC Subsidiary as of the Effective Date or during the Term that relate specifically to a Product or its manufacture or use (and are not otherwise included in GCC Core Technology). Exhibit 1.15 sets forth the Product Patents existing on the Effective Date. Exhibit 1.15 may be updated from time-to-time during the Term upon the mutual written agreement of the Parties. Product Patents excludes any Additional Joint Patents.

1.16 “Product Technology” means the Product Know-How and Product Patents.

1.17 “Sublicensee” means an Affiliate of Artiva or a Third Party to whom Artiva grants a sublicense under some or all of the rights granted to Artiva pursuant to any Product License, beyond the mere right to purchase Products from or to provide services on behalf of Artiva and its Affiliates. In no event shall GCC or any of its Affiliates be deemed a Sublicensee.

1.18 “Territory” means all countries in the world, excluding Asia, Australia and New Zealand.

1.19 Additional Definitions. Each of the following definitions is set forth in the section of the Agreement indicated below:

<u>Definition</u>	<u>Section</u>
Additional Joint Inventions	5.1
Additional Joint Patents	5.1
Agreement	Preamble
Artiva	Preamble
Artiva Indemnitees	8.1(b)
Claims	8.1(a)
Development Costs	4.2(c)
Development Plan	4.2(a)
Development Records	4.3(c)
Effective Date	Preamble
GCC	Preamble
GCC Indemnitees	8.1(a)
GCC Net Sales	3.2(f)
Indemnified Party	8.1(c)
Indemnifying Party	8.1(c)
Korean Clinical Data	4.3(c)
Korean Phase 1a/1b Development Costs	4.2(c)
Korean Phase 1a/1b Trial	4.3(a)
Notice to Practice	3.1
Parties/Party	Preamble
Preclinical Development Costs	4.2(c)
Preclinical Studies	4.3(a)
Product License	2.1
Product Royalties	3.2(a)
Product Royalty Term	3.2(b)
Protocol	4.4(a)
Selling Party	1.10
Term	6.1
Third Party License	3.2(c)(ii)

2. LICENSES AND RELATED RIGHTS

2.1 License Grant. Subject to the terms and conditions of this Agreement, GCC hereby grants Artiva during the Term an exclusive (even as to GCC and GCC Subsidiaries), royalty-bearing license, with the right to sublicense through multiple tiers as provided in Section 2.2, under the Product Technology, and GCC's interest in Additional Joint Inventions and Additional Joint Patents, to research, develop, make, have made, use, offer for sale, sell and import Products in the Field and in the Territory (the "**Product License**").

2.2 Sublicensing; Subcontracting. Artiva shall have the right to grant sublicenses of rights granted under the Product License, or subcontract its activities with respect to any Product, to its Affiliates, contractors and any other Third Party, *provided* that: (a) Artiva shall remain responsible for the performance or failure to perform by any such Affiliate, Sublicensee and subcontractor under their respective sublicensed or subcontracted rights or obligations to the same extent as if such activity were performed (or was failed to be performed) by Artiva; and (b) each such sublicense and subcontract agreement shall be consistent with the terms and conditions of this Agreement. Artiva shall provide GCC with a copy of any sublicense agreement entered into with a Sublicensee, and any amendment thereto, within [***] days of its execution (*provided* that Artiva may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement). Artiva shall provide GCC with a list of any subcontract agreements entered into with a subcontractor for contract research or contract manufacturing services in a calendar quarter within [***] days of the end of such calendar quarter, and if requested by GCC within [***] days of GCC's receipt of such list, provide GCC with a copy of any such subcontract agreement (*provided* that Artiva may redact any confidential information contained therein that is not necessary to disclose to ensure compliance with this Agreement).

2.3 Reserved Rights. GCC hereby expressly reserves all rights, interests and benefits not expressly granted to Artiva herein, including, without limitation, (a) all rights to practice, and to grant licenses under, the Product Technology and GCC's interest in Additional Joint Inventions and Additional Joint Patents outside the Territory, and (b) the right to conduct research and development to be conducted by GCC or any GCC Affiliate as contemplated by this Agreement (including without limitation the rights to conduct Preclinical Studies and Korean 1a/1b Trial as set forth in Article 4) and any services or manufacturing agreements entered into between GCC or any GCC Affiliate and Artiva.

2.4 Negative Covenant. Artiva covenants that it will not and will not permit any of its Affiliates, Sublicensees or subcontractors to use or practice any Product Technology or GCC's interest in Additional Joint Inventions and Additional Joint Patents outside the scope of the Product License. GCC covenants that it will not and will not permit any of its Affiliates, or grant the right to or assist or collaborate with any Third Party, to directly or indirectly during the Term research, develop, make, have made, use, offer for sale, sell and import any Product in the Field in the Territory, except as expressly authorized in this Agreement.

2.5 No Implied Licenses. Except as explicitly set forth in this Agreement, any other Selected Product License Agreement(s) and the Option Agreement, neither Party shall be deemed by estoppel or implication to have granted the other Party any license or other right to any intellectual property of such Party.

2.6 Disclosure of Product Know-How. Within [***] days after the Effective Date, GCC shall disclose to Artiva the Product Know-How existing as of the Effective Date. In addition, GCC shall disclose to Artiva any Product Know-How as it pertains specifically to the Product that comes into existence after the Effective Date and was not previously provided to Artiva promptly after the development thereof (and at least every [***] months). During the Term, GCC shall make available to Artiva, on a reasonable consultation basis, such advice of its technical personnel as may be reasonably requested by Artiva in connection with such transfer of Product Know-How.

2.7 Development Option. If GCC desires to pursue development of a Product in combination with an antigen-specific therapy that Artiva has determined not to pursue, the Parties shall discuss in good faith and agree on a co-development arrangement for such Product in combination with an antigen-specific therapy in mutually agreed Indications in the Territory, which shall not overlap with Indications for which Artiva is developing a Product.

3. COMPENSATION

3.1 Initial Payment. Artiva shall pay to GCC a non-refundable and non-creditable upfront payment in the amount of [***], which shall be due and payable to GCC within [***] days after the Effective Date. If and when Artiva delivers to GCC a written notice that it intends to proceed with clinical development of Product (the “**Notice to Practice**”), Artiva shall pay to GCC a non-refundable and non-creditable payment in the amount of [***], which shall be due and payable to GCC within [***] days after delivery to GCC of the Notice to Practice.

3.2 Product License Royalty Payments.

(a) Product License Royalty Rates. Artiva shall pay to GCC royalties on Net Sales of Products, the manufacture, use or sale of which are claimed by or use any Product Technology, on a country-by-country and Product-by-Product basis during the Product Royalty Term, as calculated by multiplying the applicable portion of aggregate Net Sales of the Product in the Territory by the corresponding royalty rate, as set forth in the table below, subject to the applicable adjustments in accordance with Section 3.2(e) below (the “**Product Royalties**”).

<u>Annual Net Sales of the Product in the Territory</u>	<u>Royalty Rate</u>
For that portion of annual aggregate Net Sales of the Product less than or equal to \$[***]	[***]%
For that portion of annual aggregate Net Sales of the Product greater than \$[***]	[***]%

(b) Product Royalty Term. Royalties payable under Section 3.2(a) shall be payable on a Product-by-Product and country-by-country basis in the Territory during the period commencing on the First Commercial Sale of such Product in such country in the Territory and continuing until the later of (i) expiration of the last-to-expire Valid Claim of the Product Patents and Additional Joint Patents in the country of sale claiming such Product or the manufacture or use of such Product; (ii) expiration of any Regulatory Exclusivity for such Product in such country; and (iii) the tenth (10th) anniversary of the First Commercial Sale of such Product in such country (the “**Product Royalty Term**”). Following expiration of the Product Royalty Term for any Product in a given country, no further Product Royalties shall be payable for such Product in such country, and the Product License granted to Artiva under Section 2.1 with respect to such Product in such country shall automatically become fully paid-up, perpetual and royalty-free and shall survive any expiration or termination of this Agreement.

(c) Royalty Reports and Payments. Within [***] days following the end of each calendar quarter following the First Commercial Sale of a Product upon which Product Royalties are payable anywhere in the Territory, Artiva shall provide GCC with a report containing the following information for the applicable calendar quarter, on a Product-by-Product and country-by-country basis: (i) Net Sales of such Product in such country; (ii) the basis for any adjustments to royalties due to GCC on account of Net Sales of such Product in such country; (iii) a calculation of the royalty payment due to GCC on account of Net Sales of such Product in such country; and (iv) the exchange rate used in calculating any of the foregoing; *provided* that the obligations under this Section 3.2(c) may be satisfied by the report due by Artiva to GCC under Section 6.1(c) of the Option Agreement. Concurrent with the delivery of the applicable quarterly report, Artiva shall pay the royalty payment due to GCC pursuant to this Section 3.2 for such calendar quarter.

(d) Existing Third Party Payment Obligations. GCC shall be responsible for any payments to any Affiliates or Third Parties for Patents or Information licensed or acquired by GCC prior to the Effective Date which are included in the Product Technology.

(e) Royalty Adjustments. Product Royalties shall be subject to adjustment as a result of the events set forth below.

(i) No Valid Claim. During any part of the Product Royalty Term for a Product in which there is no Valid Claim of either the GCLC Core Patents or the Product Patents in the country of sale claiming such Product or the manufacture, use or sale of such Product in such country, the Product Royalties shall be reduced by [***], which reduction will be calculated by determining the portion of total Net Sales of the relevant Product in a calendar quarter that is attributable to the country in which such reduction applies, and determining the total Product Royalties for such Product without reduction, and then reducing by [***] the applicable portion (based on Net Sales of such Product in such country as a percentage of total Net Sales of such Product) of total Product Royalties attributable to such Product in such country.

(ii) Third Party Royalty Credit. If Artiva or any of its Affiliates or Sublicensees obtains a license or sublicense from any Third Party under any intellectual property that is necessary in order to manufacture, use, sell, offer for sale or import a Product in the Territory (including any license by a Third Party to Artiva or sublicense by GCC to Artiva described in Section 5.4(e) of the Option Agreement, but excluding any license or sublicense to Artiva under an Existing Third Party Agreement as provided in Section 5.4(d) of the Option Agreement) (each a “**Third Party License**”), and GCC agrees that such Third Party License is necessary to manufacture, use, sell, offer for sale or import such Product in the Territory, such agreement not to be unreasonably withheld, then Artiva may deduct [***] of any royalty (or comparable payment based on sales of such Product) payable by Artiva or its Affiliate or Sublicensee in any calendar quarter in consideration for such Third Party License from the Product Royalties that would otherwise be due in any calendar quarter for such Product. Any amount paid to such Third Party which is entitled to be deducted under this Section 3.2(e)(ii) but is not deducted as a result of the limitation set forth in Section 3.2(e)(iv) shall be carried over and applied against Product Royalties payable to GCC in respect of such Product in such country in subsequent calendar quarters until the full deduction is taken. In no event may Artiva credit payments under a Third Party License to reduce the Product Royalties with respect to a Product under this Section 3.2(e)(ii) and also to reduce the Core IP Royalties payable with respect to the same Product that is a Licensed Product under the Option Agreement.

(iii) Biosimilar Reduction. If a Biosimilar Product to a Product is sold in any country in the Territory during the Product Royalty Term for such Product and country, the Product Royalties payable with respect to such Product in such country will be reduced by [***] for the remainder of such Product Royalty Term.

(iv) Limitation. The total deductions under Sections 3.2(e)(ii) and (iii) shall not reduce the Product Royalties payable to GCC under Section 3.2 (as reduced under Section 3.2(e)(i), if applicable) with respect to a Product in a given country in any calendar quarter by more than [***]. In no event will the Product Royalties be reduced for any reason whatsoever other than as provided in this Section 3.2(e).

(f) Additional Joint Patent Royalty. GCC shall pay to Artiva a royalty on the GCC Net Sales of each Product, the manufacture, use or sale of which is claimed by or uses any Additional Joint Patent, on a country-by-country and Product-by-Product basis during the Product Royalty Term, where the royalty rate shall be equal to [***] of the Product Royalty payable by Artiva for such Product for Net Sales in the Territory. For purposes of the foregoing, “GCC Net Sales” shall mean [***]. The foregoing royalty shall be payable on a Product-by-Product and country-by-country basis outside the Territory during the period commencing on the First Commercial Sale of such Product in such country outside the Territory and continuing until the end of the Product Royalty Term. If such royalty becomes payable by GCC, such payments shall be made in accordance with Sections 3.2(c), and 3.4 through 3.7 as applied to GCC, *mutatis mutandis*.

3.3 Milestone Payments.

(a) Development Milestone Payments. Artiva shall make the following non-refundable and non-creditable development milestone payments to GCC within [***] days after the first achievement of each applicable milestone event with respect to a Product by Artiva or its Affiliates or Sublicensees. Each such milestone payment shall be paid only once during the Term, the first time a Product reaches such milestone event and regardless of the number of times such milestone event is reached for a Product and of the number of subsequent Products reaching such milestone event. For clarification, the total milestone payments payable hereunder if all milestone events are achieved is [***].

No.	Milestone Event	Milestone Payment
1	[***]	[***]
2	[***]	[***]
3	[***]	[***]
4	[***]	[***]
5	[***]	[***]
6	[***]	[***]
7	[***]	[***]
8	[***]	[***]
9	[***]	[***]
10	[***]	[***]
11	[***]	[***]
12	[***]	[***]

(b) Sales Milestone Payments. Artiva shall make the following one-time, non-refundable and non-creditable sales milestone payments to GCC when the aggregate annual Net Sales of Products in the Territory first reach the thresholds specified below. Artiva shall notify GCC promptly of the achievement of each such sales threshold. Each sales milestone payment shall be made by Artiva within [***] days after the end of the calendar quarter in which such sales threshold is achieved. To the extent more than one sales threshold is reached in any given calendar year, then the applicable milestone payment for each such achievement shall be due and owing with respect to such calendar year. For clarification, the total milestone payments payable hereunder if all milestone events are achieved is [***].

<u>Milestone</u>	<u>Milestone Payment</u>
Territory-wide Net Sales of Products in a calendar year of at least \$[***]	[***]
Territory-wide Net Sales of Products in a calendar year of at least \$[***]	[***]
Territory-wide Net Sales of Products in a calendar year of at least \$[***]	[***]

3.4 Payment Method; Currency. All payments due under this Agreement to GCC shall be made by bank wire transfer in immediately available funds to an account designated by GCC. All payments hereunder shall be made in U.S. Dollars. When conversion of payments from any currency other than U.S. Dollars is required, such conversion shall be at an exchange rate equal to the weighted average of the rates of exchange for the currency of the country from which such payments are payable as published by *The Wall Street Journal*, Western U.S. Edition, during the calendar quarter in which the applicable sales were made.

3.5 Records; Inspection. Artiva shall, and shall cause its Affiliates and Sublicensees to, keep complete, true and accurate books of account and records for the purpose of determining the payments to be made under this Agreement. Such books and records shall be kept for [***] years following the end of the calendar year to which they pertain. Such records shall be open for inspection during such period by independent accountants, solely for the purpose of verifying payment statements hereunder for a period covering not more than [***] months prior to the date of request; *provided* that no period shall be subject to inspection under this section more than once and inspections with respect to payments on a Product under this Agreement shall be done concurrently with respect to payments on the same Product under the Option Agreement to avoid duplication. Such inspections shall be made no more than once each calendar year, on reasonable notice during normal business hours. The independent accountants will execute a reasonable written confidentiality agreement with Artiva and will disclose to GCC only such information as is reasonably necessary to provide GCC with information regarding any actual or potential discrepancies between amounts reported and actually paid and amounts payable under this Agreement. The auditor will send a copy of the report to Artiva at the same time it is sent to GCC. The report sent to both Parties will include the methodology and calculations used to determine the results. Any unpaid amounts that are discovered shall be paid together with interest of [***] per annum promptly by Artiva. Inspections conducted under this Section 3.5 shall be at the expense of GCC, unless the inspection discloses an underpayment by Artiva of [***] or more of the amount due for any period covered by the inspection, whereupon all costs relating to the inspection for such period shall be paid promptly by Artiva. If the inspection discloses an overpayment by Artiva, then Artiva will deduct the amount of such overpayment from amounts otherwise owed to GCC under this Agreement, unless no further payments are due hereunder, in which case the amount of such overpayment shall be refunded by GCC to Artiva.

3.6 Income Tax Withholding. Except as otherwise provided herein, GCC will pay any and all taxes levied on account of any payments made to it under this Agreement. GCC shall be responsible for any transfer, documentary, sales use, stamp, registration, value added or other similar tax (“**Transfer Tax**”) that is imposed with respect to the payments or the related transfer of rights or other property pursuant to the terms of this Agreement. If any taxes are required to be withheld by Artiva from any payment made to GCC under this Agreement (“**Withholding Taxes**”), Artiva shall (a) deduct such Withholding Taxes from the payment made to GCC, (b) timely pay the Withholding Taxes to the proper taxing authority, and (c) send proof of payment to GCC and certify its receipt by the taxing authority within [***] days following such payment and all such Withholding Taxes shall be treated for all purposes under this Agreement as having been paid to GCC. To extent Artiva fails to withhold Withholding Taxes from, or apply and pay Transfer Taxes with respect to, any payment to GCC and it is determined that Artiva should have withheld Withholding Taxes or applied and paid Transfer Taxes, GCC agrees to indemnify and/or reimburse Artiva for any Withholding Taxes or Transfer Taxes.

3.7 Tax Documentation. GCC has provided a properly completed and duly executed IRS Form W-8BEN-E to Artiva. Prior to the receipt of any payment under this Agreement, GCC (and any other recipient of payments by Artiva under this Agreement) shall, to the extent it is legally permitted to, provide to Artiva, at the time or times reasonably requested by Artiva or as required by applicable Law, such properly completed and duly executed IRS Forms W-8 or W-9 claiming the benefits of an applicable tax treaty in the case of IRS Form W-8BEN-E. Such tax forms will, if applicable and legally permissible, claim the benefits of an applicable tax treaty to permit payments made under this Agreement to be made without, or at a reduced rate of, withholding for taxes.

3.8 Diligence. Artiva shall use Commercially Reasonable Efforts to file an IND for a Product with the FDA within [***] days after delivery of the Notice to Practice to GCC unless otherwise mutually agreed to by the Parties.

4. DEVELOPMENT OUTSIDE THE TERRITORY

4.1 Development of Product by GCC. In accordance with the provisions of Section 2.3 of the Option Agreement and Section 2.3 of this Agreement, GCC reserves and has sole right and responsibility, and ultimate decision-making authority, at its sole cost and expense, for conducting or having conducted development activities (including preclinical toxicology studies), regulatory activities (including, without limitation, filing for and obtaining Regulatory Approval, as applicable), manufacturing activities and commercialization activities outside the Territory with respect to the Product. Without limiting such rights of GCC, GCC agrees that it will conduct certain research and development activities in accordance with the provisions of this Article 4.

4.2 Development Plan.

(a) Development Plan for GCC. GCC shall propose, and the Parties shall discuss and mutually agree on, a written development plan for the Preclinical Studies and Korean Phase 1a/1b Trial to be performed by GCC (as may be amended, the “**Development Plan**”). The Development Plan shall set forth (without limitation) for the Product: non-clinical study designs, vendors to be used for the Development Plan activities, details of process development and manufacture of the Product, Product manufacturing plan and the Korean Phase 1a/1b Trial design in synopsis form. In the Development Plan, the Parties shall mutually agree on the scope of results expected to be reported from the Korean Phase 1a/1b Trial (e.g., number of patients, patient characteristics, median follow-up time), and prior to commencing the Korean Phase 1a/1b Trial, the Parties shall mutually agree on the form and contents of the Clinical PoC Data Package that will be shared with Artiva.

(b) Amendment of Development Plan. The draft Development Plan that is mutually agreed upon by the Parties is attached hereto as Exhibit 4.1(b), and the JDC shall review and approve an initial Development Plan based on such draft at its first meeting after the Effective Date. The JDC shall regularly review the Development Plan and the progress of activities being conducted under the Development Plan. In the event of any inconsistency between the Development Plan and this Agreement, the terms of this Agreement shall prevail.

(c) Budget. Prior to commencing the Preclinical Studies and Korean Phase 1a/1b Trial, the Parties shall mutually agree on the budget for the Preclinical Studies (the “**Preclinical Development Costs**”) and the Korean Phase 1a/1b Trial (the “**Korean Phase 1a/1b Development Costs**”), and together with the Preclinical Development Costs, the “**Development Costs**”), which shall be included in the Development Plan. GCC shall pay all costs for such trial, provided, however, that Artiva shall pay the Development Cost Share upon achievement of the applicable milestone event in accordance with Section 3.3(a).

4.3 Development Plan Activities.

(a) Development Plan Activities. GCC shall have the right to conduct preclinical, IND-enabling studies and CMC Activities for the Product (the “**Preclinical Studies**”) and the first-in-human (FIH) clinical trial of the Product in the Republic of Korea (the “**Korean Phase 1a/1b Trial**”) in accordance with the Development Plan. Subject to the terms and conditions of this Agreement and the oversight of the JDC, GCC shall conduct the activities under the Development Plan in accordance with the Development Plan, including the timelines specified therein, and in a good scientific manner and in compliance with all Applicable Laws. Artiva shall not make, use, or sell the Product for purposes of clinical development until Artiva delivers the Notice to Practice to GCC and makes the initial payment as required under Section 3.1, after which Artiva shall be free to practice the Product License in all respects.

(b) Development Costs.

(i) GCC shall solely be responsible for all Development Costs, provided, however, Artiva shall pay the Development Cost Share upon achievement of the applicable milestone event in accordance with Section 3.3(a). Within [***] days after the end of each Calendar Quarter, GCC shall provide to Artiva a written report of the Development Costs incurred with respect to the performance of the Development Plan and the Korean Phase 1a/1b Trial. If requested by Artiva, GCC will promptly provide invoices or other supporting documentation in sufficient detail to permit Artiva to confirm the accuracy of the reported costs incurred.

(ii) To the extent Artiva incurs Direct Costs on behalf of GCC in accordance with the Development Plan, Artiva shall submit invoices and other supporting documentation in support thereof to GCC and GCC shall reimburse Artiva for such costs in full within [***] days of such submission; provided that such reimbursed costs shall be deemed to form part of the Direct Costs incurred and paid by GCC (to the extent applicable under the definition of the Direct Costs) and shall be taken into account as part of determining the Development Cost Share payable upon achievement of the applicable milestone event in accordance with Section 3.3(a).

(iii) The Parties shall agree in writing on the calculation of the Development Cost Share for purposes of the milestone payment in accordance with Section 3.3(a). GCC shall keep and maintain complete and accurate books and records pertaining to the Development Costs and shall be subject to inspection rights with respect thereto, in each case akin to those applied to Artiva in Section 3.5, applied *mutatis mutandis*.

(c) Development Records. GCC shall maintain complete, current, and accurate records (in the form of technical notebooks or electronic files) of all development activities conducted by it under the Development Plan and all information resulting from such work, including, for clarity, all clinical data from the Korean Phase 1a/1b Trial (such clinical data, the “**Korean Clinical Data**”), SOPs and vendors involved in the Korean Phase 1a/1b Trial (collectively with Korean Clinical Data, and including all data, information and results in such records, the “**Development Records**”). GCC shall ensure that such records fully and properly reflect all development activities performed and results achieved therefrom in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes. GCC shall permit Artiva to review and copy such records at reasonable times during normal business hours and to obtain access to originals of such records if needed for patent or regulatory purposes or for other legal proceedings subject to Section 4.4(b). Upon reasonable request, GCC shall provide the JDC with copies of such records detailing its development activities and the results of such activities.

(d) Development Reports and Updates. At each regularly scheduled JDC meeting, GCC shall provide the JDC with regular reports detailing its development activities under the Development Plan and the results of such activities. The Parties shall discuss the status, progress, and results of development activities under the Development Plan at such JDC meetings. GCC shall respond in a timely fashion to any reasonable requests of Artiva for additional information as may be readily available to GCC related to such reports provided to the JDC. In addition to the foregoing reports and meetings with the JDC, GCC shall promptly provide Artiva with any material updates on development activities under the Development Plan.

4.4 The Korean Phase 1a/1b Trial.

(a) Conduct. GCC shall (i) act as the sponsor of the Korean Phase 1a/1b Trial, and (ii) manage and be primarily responsible for the conduct of the applicable Korean Phase 1a/1b Trial, including (A) managing the operations of the Korean Phase 1a/1b Trial in accordance with the applicable Protocol, including overseeing compliance by any subcontractor (including clinical research organizations) engaged by GCC for the Korean Phase 1a/1b Trial; and (B) ensuring that all agreements with Third Party subcontractors and clinical trial sites (1) are consistent with the relevant terms of this Agreement, including confidentiality and intellectual property provisions consistent with those set forth in this Agreement, and (2) permit the Parties to audit trial sites for quality assurance and to inspect and copy all data, documentation and work products relating to the Korean Phase 1a/1b Trial. GCC shall conduct the Korean Phase 1a/1b Trial in accordance with a protocol (the “**Protocol**”) to be drafted by GCC and approved by the JDC. Amendments to the Protocol and all other aspects of the Korean Phase 1a/1b Trial shall be subject to approval of the JDC or by written agreement of the Parties.

(b) Ownership of Development Records. GCC shall solely and exclusively own all Development Records. Contingent and effective upon (1) Artiva serving the Notice to Practice and making the initial payment as set forth in Section 3.1, and (2) Artiva paying the Development Cost Share upon achievement of Milestone 1 as set forth in Section 3.3(a), GCC hereby assigns to Artiva a joint interest to the Development Records such that GCC and Artiva shall jointly own the Development Records. Whilst GCC solely owns the Development Records, GCC hereby grants to Artiva a limited right to use and right of reference such Development Records solely for the purposes of preparing and filing the IND for a Product. GCC shall maintain all Development Records in its database and shall promptly grant access or provide copies to such Development Records to Artiva in accordance with Section 4.3(c). Following delivery of the Notice to Practice, Artiva shall own, and shall be solely responsible for maintaining, the global safety database for the Product, and shall be responsible for the safety reporting for the Product to the applicable Regulatory Authority in the Territory. The Development Records shall be the Confidential Information of both Parties, provided that if the Agreement is terminated prior to GCC’s foregoing assignment to Artiva of a joint interest to the Development Records, the Development Records shall thereafter be the Confidential Information of GCC only, and not of Artiva.

(c) Provision of Korean Clinical Data; Final Report. GCC shall promptly provide Artiva with (a) periodic status reports on the Korean Phase 1a/1b Trial recruitment and other metrics consistent with GCC’s internal reporting for clinical trials and development activities, and unexpected events that may have an adverse effect on safety and recruitment, (b) supporting documentation for the Korean Phase 1a/1b Trial (e.g., CRFs, analysis plans), (c) preliminary and final Korean Clinical Data, and interim, preliminary and final results and reports from the Korean Phase 1a/1b Trial, (d) output from advisory committees and investigator meetings and (e) any and all such documentation generated by or on behalf of GCC or its Affiliate from its development activities under this Agreement as such documentation could reasonably be deemed to affect the development of the Product, which the Parties shall agree in further detail through a data sharing agreement. Upon the locking of the database that contains the data generated in the Korean Phase 1a/1b Trial so that such database is ready for analysis, GCC shall provide Artiva with an electronic draft of the final report summarizing all Korean Clinical Data with respect to the Korean Phase 1a/1b Trial. Artiva shall have the right to provide its comments to such draft report within [***] of Artiva’s receipt thereof. If Artiva does not provide comments within such [***] period, then Artiva shall be deemed to have accepted such draft report. GCC shall consider in good faith any comments provided by Artiva on the draft report and shall provide Artiva the final version of the final report promptly following its completion.

(d) Use of Unpublished Clinical Data. Neither Party shall disclose any unpublished Korean Clinical Data and other documentation prepared specifically for use in connection with the Korean Phase 1a/1b Trial to any Third Party, except that a Party may disclose such portion of the unpublished Korean Clinical Data to the extent such disclosure is reasonably necessary in the following situations:

(i) to the extent the Parties agree to such disclosure;

(ii) in the case of GCC, to the extent such disclosure is required to clinical sites in accordance with the applicable clinical trial agreements for the Korean Phase 1a/1b Trial;

(iii) in the case of GCC, to the extent such disclosure is required to comply with Applicable Laws or is in connection with Regulatory Materials or communications with Regulatory Authorities in the Republic of Korea regarding the Product or the Korean Phase 1a/1b Trial;

(iv) to the extent such disclosure is required to Regulatory Authorities in compliance with a Party's policies and procedures relating to pharmacovigilance and adverse event reporting for the Product; or

(v) to the extent such disclosure is expressly permitted under Section 9.3 of the Option Agreement, provided that the Parties shall mutually agree on any disclosures of Korean Clinical Data for filing or prosecuting Patents in accordance with Section 5.2.

5. INTELLECTUAL PROPERTY

5.1 Ownership. All Information, discoveries and inventions (patentable or not) generated, conceived or reduced to practice in the performance of the research, development, commercialization or other activities contemplated by this Agreement, including all intellectual property rights therein, shall be as follows: (a) Artiva shall own all Information, discoveries and inventions made solely by employees, agents or independent contractors of Artiva and all intellectual property rights therein, (b) GCC shall own all Information, discoveries and inventions made solely by employees, agents or independent contractors of GCC and all intellectual property rights therein, and (c) the Parties shall jointly own all Information, discoveries and inventions made jointly by employees, agents or independent contractors of each Party ("**Additional Joint Inventions**") and all intellectual property rights therein; provided, however, ownership to the Development Records shall be governed by the provisions of Section 4.3(b). All Patents claiming Joint Inventions shall be referred to herein as "**Additional Joint Patents**". Subject to the rights and licenses granted under this Agreement, including the obligations in Section 3.2, any other Selected Product License Agreement and the Option Agreement, each Party shall be entitled to practice, grant licenses to, assign and exploit the Additional Joint Inventions and Additional Joint Patents without the duty of accounting or seeking consent from the other Party within the Party's respective territory.

5.2 Patent Prosecution.

(a) Product Patents. Artiva shall have the first right, but not the obligation, at Artiva's expense, to control the preparation, filing, prosecution (including any interferences, re-issue proceedings and re-examinations) and maintenance of the Product Patents in the Territory. Artiva shall keep GCC reasonably informed of progress with regard to the preparation, filing, prosecution and maintenance of Product Patents in the Territory, including the countries in the Territory in which it intends to file, maintain or abandon a given Product Patent. Artiva will notify GCC of all warning letters, conflict proceedings, re-examinations, re-issuance, oppositions, revocation proceedings or any

other material challenge relating to a given Product Patent in the Territory. Artiva will consult with, and consider in good faith the requests and suggestions of, GCC with respect to strategies for filing and prosecuting such Product Patents in the Territory. In the event that Artiva desires to abandon or cease prosecution or maintenance of any Product Patent in the Territory, Artiva shall provide reasonable prior written notice to GCC of such intention (which notice shall, in any event, be given no later than [***] days prior to the next deadline for any action that may be taken with respect to such Product Patent in the Territory with the applicable patent office), and upon GCC's written election provided no later than [***] days after such notice from Artiva, Artiva shall continue prosecution or maintenance of such Product Patent at GCC's direction and expense. If GCC does not provide such election within [***] days after such notice from Artiva, Artiva may continue prosecution and maintenance of such Product Patent in the Territory or discontinue prosecution and maintenance of such Product Patent in the Territory. GCC shall have the sole right, but not the obligation, at GCC's expense, to control the preparation, filing, prosecution (including any interferences, reissue proceedings and reexaminations) and maintenance of the Product Patents outside the Territory. GCC shall keep Artiva reasonably informed of progress with regard to the preparation, filing, prosecution and maintenance of Product Patents outside the Territory to the extent such activities could affect the Product Patents in the Territory.

(b) Additional Joint Patents. Additional Joint Patents shall be governed by Section 5.2(a).

(c) Cooperation. Promptly following the Effective Date, (but no less than [***] days before any statutory bar date), GCC will transfer to Artiva all Information concerning the Product Patents in the Territory. GCC shall cooperate with Artiva and shall execute any power of attorney or similar document, in each case to the extent reasonably required to allow Artiva to assume the preparation, filing, prosecution and maintenance in the Territory of the Product Patents in Artiva's name. Artiva shall cooperate with GCC, in each case to the extent reasonably required to allow GCC to assume the preparation, filing, prosecution and maintenance, of any Patent abandoned by Artiva pursuant to Section 5.2(a).

5.3 Patent Enforcement.

(a) Notification. If either Party becomes aware of any existing or threatened infringement of the Product Patents, Additional Joint Patents or Product Technology related to any Existing Third Party Agreements, or the filing of a BLA by a Third Party for a product that names a Product as a reference product (or similar filing in a country other than the U.S.), it shall promptly notify the other Party in writing to that effect, and the Parties will consult with each other regarding any actions to be taken with respect to such infringement.

(b) Right to Enforce. Artiva shall have the first right, but shall not be obligated, to bring and control an infringement action with respect to any Product Patent or Additional Joint Patent in the Territory against any person or entity, at Artiva's sole cost and expense. If Artiva does not bring such an action with respect to a Product Patent or Additional Joint Patent in the Territory (or settle or otherwise secure the abatement of such infringement) prior to the earlier of: (i) [***] days following Artiva's receipt or delivery of the notice under Section 5.3(a), or (ii) [***] days before the deadline, if any, set forth in the applicable Laws for the filing of such actions, GCC shall have the right to bring and control any such action, at its own expense and by counsel of its own choice.

(c) Cooperation. Each Party shall cooperate fully with the enforcing Party in such enforcement, at such enforcing Party's request and expense, including joining such action as a party plaintiff if required by applicable Laws to pursue such action. The enforcing Party shall keep the other Party regularly informed of the status and progress of such enforcement efforts, shall reasonably consider the other Party's comments on any such efforts. The non-enforcing Party shall be entitled to separate representation in such matter by counsel of its own choice and at its own expense, but such Party shall at all times cooperate fully with the enforcing Party. Neither Party shall have the right to settle any patent infringement litigation under this Section 5.3 in a manner that diminishes the rights or interests of the other Party without the prior written consent of such other Party, such consent not to be unreasonably withheld or delayed.

(d) Expenses and Recoveries. The enforcing Party bringing a claim, suit or action under this Section 5.3 shall be solely responsible for any expenses incurred by such Party as a result of such claim, suit or action. If such Party recovers monetary damages in such claim, suit or action, except as otherwise agreed by the Parties in connection with a cost-sharing arrangement, such recovery shall be allocated first to the reimbursement of any expenses incurred by the Parties in such litigation, and any remaining amounts shall be shared as follows: [***].

(e) Enforcement Outside the Territory. GCC shall have the sole right, but shall not be obligated, to bring and control an infringement action with respect to any Product Patent or Additional Joint Patent outside the Territory against any person or entity, at GCC's sole cost and expense. GCC shall keep Artiva reasonably informed of the enforcement of Product Patents or Additional Joint Patents outside the Territory to the extent such activities could affect the Product Patents or Additional Joint Patents in the Territory.

5.4 Patent Oppositions and Other Proceedings.

(a) In the Territory. If a Product Patent or Additional Joint Patent in the Territory becomes the subject of any proceeding commenced by a Third Party in connection with an opposition, action for declaratory judgment, nullity action, interference or other attack upon the validity, title or enforceability thereof, then Artiva shall have the first right, but not the obligation, to control such defense at its own expense using counsel of its own choice. If Artiva decides that it does not wish to defend against such action, it shall notify GCC reasonably in advance of all applicable deadlines, and GCC shall thereafter have the right, but not the obligation, to assume defense of such action at its own expense.

(b) The Party controlling any defense under Section 5.4(a) shall permit the non-controlling Party to participate in the proceedings to the extent permissible under applicable Laws and to be represented by its own counsel at the non-controlling Party's expense. Notwithstanding any of the foregoing, the Party controlling any enforcement action pursuant to Section 5.3 shall also have the sole right to control the response to any attack on the validity, title, or enforceability of a Patent that is asserted by the alleged infringer(s) as a counterclaim or affirmative defense in such action. Neither Party shall have the right to settle any proceeding under this Section 5.4 in a manner that diminishes the rights or interests of the other Party without the prior written consent of such other Party, such consent not to be unreasonably withheld or delayed.

(c) Outside the Territory. GCC shall have the sole right, but shall not be obligated, to control any opposition, action for declaratory judgment, nullity action, interference or other attack upon the validity, title or enforceability of any Product Patent or Additional Joint Patent outside the Territory, at GCC's own expense using counsel of its own choice. GCC shall keep Artiva reasonably informed of any such defense of Product Patents or Additional Joint Patents outside the Territory to the extent such activities could affect the Product Patents or Additional Joint Patents in the Territory.

5.5 Patent Marking. Artiva shall mark Product (or when the character of the product precludes marking, the package containing any such Product) marketed and sold by Artiva or its Affiliates or Sublicensees in accordance with all applicable Laws relating to patent marking.

5.6 Infringement of Third Party Rights. If any Product used or sold by Artiva or its Affiliates or Sublicensees becomes the subject of a Third Party's claim or assertion of infringement of a Patent, each Party shall promptly notify the other Party. Neither Party shall have the right to settle any patent infringement litigation under this Section 5.6 in a manner that diminishes the rights or interests of the other Party without the written consent of such other Party (which shall not be unreasonably withheld).

6. TERM AND TERMINATION

6.1 Term. This Agreement shall become effective on the Effective Date and, unless earlier terminated pursuant to this Article 6, shall remain in effect until the expiration of the last Product Royalty Term in the Territory (the “**Term**”).

6.2 Termination for Material Breach. Each Party shall have the right to terminate this Agreement in its entirety immediately upon written notice to the other Party if the other Party materially breaches its obligations under this Agreement and, after receiving written notice identifying such material breach in reasonable detail, fails to cure such material breach within sixty (60) days from the date of such notice (or within thirty (30) days from the date of such notice in the event such material breach is solely based on the breaching Party’s failure to pay any amounts due hereunder); *provided, however*, in the case of a breach or violation that cannot be cured within such sixty (60) day period, the non-breaching Party may terminate this Agreement following such sixty (60) day period only if the breaching Party shall have failed to commence substantial remedial actions within such sixty (60) day period and to use reasonable efforts to pursue the same. Any right to terminate under this Section 6.2 shall be stayed and the cure period tolled in the event that, during any cure period, the breaching Party shall have initiated dispute resolution in accordance with Article 13 of the Option Agreement with respect to the alleged breach, which stay and tolling shall last so long as the breaching Party diligently and in good faith cooperates in the prompt resolution of such dispute resolution proceedings. Each Party shall be entitled to offset, against amounts payable to the other Party under this Agreement, any amounts of damages determined, in a final decision by the applicable court action or other legal proceeding, to be owed to such Party by the other Party based on the other Party’s material breach of this Agreement.

6.3 Termination Upon Insolvency. Either Party may terminate this Agreement upon written notice to the other Party, if, at any time, the other Party (a) files in any court or agency pursuant to any statute or regulation of any state, country or jurisdiction, a petition in bankruptcy or insolvency or for reorganization or for an arrangement or for the appointment of a receiver or trustee of such other Party or of its assets, (b) is served with an involuntary petition against it, filed in any insolvency proceeding that is not dismissed within ninety (90) days after the filing thereof, or (c) makes an assignment of the assets associated with this Agreement for the benefit of its creditors.

6.4 Termination by Artiva or GCC.

(a) Artiva may terminate this Agreement in its entirety without cause upon ninety (90) days prior written notice to GCC.

(b) GCC may terminate this Agreement in its entirety with sixty (60) days’ notice if Artiva does not deliver the Notice to Practice within ninety (90) days of receipt of the final report from GCC summarizing all Korean Data.

6.5 Effects of Expiration or Termination of this Agreement. Upon any expiration or termination of this Agreement, all rights and obligations of the Parties shall terminate entirely, except as provided in this Section 6.5 and Section 6.7 and the sections referenced therein and:

(a) **Termination of License to Artiva.** All rights and licenses granted to Artiva hereunder shall terminate and the licenses shall revert to GCC, except for any and all licenses that survive expiration or termination in accordance with the last sentence of Section 3.2(b); *provided* that if this Agreement is terminated by GCC pursuant to Section 6.2 or 6.3, any sublicense granted to a Sublicensee that is not in breach under the applicable sublicense (and whose actions or omissions did not result in a breach by Artiva giving rise to GCC’s right of termination) will continue as a direct license from GCC so long as the Sublicensee makes all payments to GCC required under Section 3.2 and Section 3.3.

(b) Remaining Inventories. Artiva or its Affiliates, to the extent that such parties continue to have stocks of usable Products that would be subject to payment of Product Royalties pursuant to Section 3.2, may continue to fulfill orders received for Products until [***] months following the date of termination. For Products sold by Artiva or its Affiliates after the effective date of a termination, Artiva shall continue to pay Product Royalties and Sales Milestone Payments pursuant to Section 3.2 and Section 3.3, as applicable.

(c) Additional Effects of Termination. Upon any termination of this Agreement, except termination of this Agreement by Artiva under Section 6.2, effective as of such termination, Artiva shall promptly (A) assign and transfer (or cause to be assigned and transferred) to GCC or its designee (and provide copies of) all Regulatory Materials and Regulatory Approvals held in the name of Artiva, or any Affiliate it controls (within the meaning of Section 1.1 of the Option Agreement), relating to any Product, including related correspondence with Regulatory Authorities and (B) disclose to GCC, and grant to GCC a Right of Reference and Use (as that term is defined in 21 C.F.R. § 314.3(b) or any non-United States equivalent) with respect to, all pre-clinical and clinical data, including pharmacology and biology data, in Artiva's or its applicable controlled Affiliates' Control with respect to any Product.

6.6 Damages; Relief. Termination of this Agreement shall not preclude either Party from claiming any other damages, compensation or relief that it may be entitled to upon such termination.

6.7 Survival. Termination or expiration of this Agreement shall not affect any rights or obligations of the Parties under this Agreement that have accrued prior to the date of termination or expiration (including any rights or obligations with respect to payments due and owing prior to the date of termination or expiration). Notwithstanding anything to the contrary, the following provisions shall survive any expiration or termination of this Agreement: Articles 1, 5 and 9 and Sections 2.5, 3.2(b) (final sentence only), 3.5 (for the term stated therein), 4.3(b), 6.5, 6.6, 6.7, 6.8, 7.5, 8.1, 8.2 and 8.3 (for [***] years), as well as Article 1 (Definitions) to the extent necessary to give meaning to terms defined therein, Articles 9 and 13 and Sections 14.2 through Section 14.11 of the Option Agreement as applied to this Agreement pursuant to Section 9.2.

6.8 Rights under Bankruptcy or Insolvency Laws. All rights and licenses granted under or pursuant to this Agreement by one Party to the other Party are, and will otherwise be deemed to be, for purposes of Section 365(n) of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws, licenses of right to "intellectual property" as defined under Section 101 of the U.S. Bankruptcy Code or comparable provision of applicable bankruptcy or insolvency laws. The Parties agree that a Party that is a licensee of such rights under this Agreement will retain and may fully exercise all of its rights and elections under the provisions of applicable bankruptcy or insolvency laws. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party to this Agreement under the provisions of applicable bankruptcy or insolvency laws, the other Party will be entitled to a complete duplicate of (or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property, and same, if not already in its possession, will be promptly delivered to it (a) upon any such commencement of a bankruptcy or insolvency proceeding upon its written request therefor, unless the bankrupt Party elects to continue to perform all of its obligations under this Agreement, or (b) if not delivered pursuant to clause (a) above, following the rejection of this Agreement by or on behalf of the bankrupt Party upon written request therefor by the other Party.

7. REPRESENTATIONS AND WARRANTIES AND COVENANTS

7.1 Mutual Representations and Warranties. Each Party hereby represents and warrants to the other Party as follows:

(a) Corporate Existence. As of the Effective Date, it is a company or corporation duly organized, validly existing, and in good standing under the Laws of the jurisdiction in which it is incorporated.

(b) Corporate Power, Authority and Binding Agreement. As of the Effective Date, (i) it has the corporate power and authority and the legal right to enter into this Agreement and perform its obligations hereunder; (ii) it has taken all necessary corporate action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder; and (iii) this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, and binding obligation of such Party that is enforceable against it in accordance with its terms.

(c) No Conflicts. The execution and delivery of this Agreement, and the performance by such Party of its obligations under this Agreement, including the grant of rights and licenses to the other Party pursuant to this Agreement, does not and will not: (i) conflict with, nor result in any violation of or default under, any instrument, judgment, order, writ, decree, contract or provision to which such Party is bound; (ii) give rise to the suspension, revocation, impairment, forfeiture or non-renewal of any material permit, license, authorization or approval that applies to such Party, its business or operations or any of its assets or properties; or (iii) conflict with any rights granted by such Party to any Third Party or breach any obligation that such Party has to any Third Party.

7.2 GCC Representations and Warranties. GCC represents and warrants to Artiva as of the Effective Date that:

(a) GCC is the sole and exclusive owner of the Patents set forth on Exhibit 1.15, in each case free and clear of all liens, and GCC has the right to grant the licenses, sublicenses and other rights with respect to the Product Patents that it purports to grant hereunder. Exhibit 1.15 is a true and complete list of all Patents Controlled by GCC or any GCC Subsidiary as of the Effective Date that relate specifically to a Product or its manufacture or use (other than any GCC Core Patents). All official fees, maintenance fees and annuities for the Product Patents have been paid through the Effective Date.

(b) All issued Product Patents are in full force and effect and subsisting, and inventorship of each Patent is properly identified on such Patents. No Third Party has asserted in writing that any issued Product Patent is invalid or unenforceable. None of the Product Patents is currently involved in any interference, reissue, reexamination, or opposition proceeding, and no such proceeding is threatened to the Knowledge of GCC. GCC has taken reasonable security measures consistent with industry standard practices, including measures against unauthorized disclosure, to protect the secrecy and confidentiality of trade secrets within the Product Know-How. GCC and GCC Subsidiaries have complied with all duties of candor required by applicable Governmental Authorities in the prosecution by GCC or any GCC Subsidiaries of any rights in the Product Technology.

(c) GCC (i) has provided Artiva a true and complete copy of the Existing Third Party Agreements, including any amendments thereto, and the Existing Third Party Agreements are in full force and effect in accordance with its terms; and (ii) is in compliance in all material respects with its obligations under the Existing Third Party Agreements and, to GCC's knowledge, (A) the other parties to the Existing Third Party Agreements have not breached the Existing Third Party Agreements in any material respect, and (B) there is no basis for termination of the Existing Third Party Agreements;

(d) To GCC's Knowledge, there are no activities by Third Parties that would constitute an infringement of the Product Patents or misappropriation of the Product Know-How.

(e) Neither GCC nor any GCC Subsidiary has received any written notice from any person, or have Knowledge of, any actual or threatened claim or assertion that the use or practice of the Product Technology infringes or misappropriates the intellectual property rights of a Third Party.

(f) There are no actual, pending, or alleged or threatened in writing, adverse actions, suits, claims, interferences or formal governmental investigations by or against GCC or any GCC Subsidiary in or before any court or Governmental Authority involving Product Technology.

(g) GCC and GCC Subsidiaries have complied in all material respects with all applicable Laws, including all good clinical practices, good laboratory practices and good manufacturing practices, permits, governmental licenses, registrations, approvals, authorizations, orders, injunctions and decrees, in the research, development, manufacture and use of any Product, and neither GCC nor any GCC Subsidiary has received any written notice from any Governmental Authority claiming that any such activities as conducted by it are not in such compliance.

(h) All of GCC's and GCC Subsidiaries' employees acting on its behalf who have performed research, development, manufacturing or regulatory activities with respect to any Product are and will be obligated under a binding written agreement to comply with obligations of confidentiality and non-use no less restrictive than those set forth in Article 9 of the Option Agreement.

7.3 Covenants. Each Party covenants to the other Party as follows:

(a) **No Debarment.** Neither such Party, nor, in the case of GCC, its GCC Subsidiaries, is debarred or disqualified under the United States Federal Food, Drug and Cosmetic Act or comparable applicable Laws in the Territory and, in the course of development, manufacturing or other activities relating to any Product, neither Party, nor, in the case of GCC, its GCC Subsidiaries, has used or shall use any employee, consultant or subcontractor who has been debarred or disqualified or, to such Party's Knowledge, is the subject of debarment or disqualification proceedings by a Regulatory Authority. Each Party shall notify the other Party promptly upon becoming aware that any of its or its subsidiaries' employees, consultants or subcontractors involved in any development, manufacturing or other activities relating to any Product has been debarred or disqualified or is the subject of debarment or disqualification proceedings by any Regulatory Authority.

(b) **Compliance.** Both Parties and their respective Affiliates shall comply in all material respects with all applicable Laws in the development, manufacture and commercialization of any Product, in each case, to the extent applicable, including the statutes, regulations and written directives of the FDA, the EMA and any other Regulatory Authorities, the Federal Food, Drug & Cosmetic Act, as amended, the Prescription Drug Marketing Act, the Federal Health Care Programs Anti-Kickback Law, 42 U.S.C. 1320a-7b(b), the statutes, regulations and written directives of Medicare, Medicaid and all other health care programs, as defined in 42 U.S.C. § 1320a-7b(f), and the Foreign Corrupt Practices Act of 1977, each as may be amended from time to time.

(c) **Employees and Subcontractors.** During the Term, all employees and subcontractors of a Party or its Affiliates performing research, development, commercialization or other activities contemplated hereunder on behalf of such Party or its Affiliates shall be obligated to undertake in writing obligations of ownership of Information, discoveries and inventions which are the same as those undertaken by the Parties pursuant to Section 5.1.

7.4 Additional GCC Covenant. GCC hereby covenants to Artiva that during the Term, GCC shall not amend, modify or terminate any of the Existing Third Party Agreements in a manner that could affect Artiva, except with Artiva's prior written consent.

7.5 Disclaimer. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR NON-MISAPPROPRIATION OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS, ARE MADE OR GIVEN BY OR ON BEHALF OF A PARTY, AND ALL REPRESENTATIONS AND WARRANTIES, WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE, ARE HEREBY EXPRESSLY EXCLUDED.

8. INDEMNIFICATION AND LIMITATION OF LIABILITY

8.1 Indemnification.

(a) Indemnification by Artiva. Artiva shall defend, indemnify, and hold GCC and its Affiliates and their respective officers, directors, employees, and agents (the “**GCC Indemnitees**”) harmless from and against any and all damages or other amounts payable by such GCC Indemnitees, including any reasonable attorneys’ fees, taxes (including penalties and interest), and costs of litigation incurred by, such GCC Indemnitees, to the extent resulting from claims, suits, proceedings, or causes of action brought by any Third Party (“**Claims**”) against such GCC Indemnitees that arise from or are based on: (i) the development, manufacture or commercialization of any Product in the Territory, or performance of the CMC Activities, by or on behalf of Artiva or its Affiliates or Sublicensees (excluding in all cases GCC or its Affiliates); (ii) the breach of any of Artiva’s obligations under this Agreement, including Artiva’s representations, warranties or covenants set forth herein; (iii) the use or application of a Third Party License in the development, manufacture, commercialization or other disposal of any Product in the Territory; or (iv) the willful misconduct or negligent acts of Artiva or any of its Affiliates or Sublicensees or any of its or their respective officers, directors, employees or agents. The foregoing indemnity obligation shall not apply to the extent that any of the Claims arises from, is based on, or results from any activity described in Section 8.1(b)(i), (ii) or (iii) for which GCC is obligated to indemnify the Artiva Indemnitees under Section 8.1(b).

(b) Indemnification by GCC. GCC shall defend, indemnify, and hold Artiva and its Affiliates and their respective officers, directors, employees, and agents (the “**Artiva Indemnitees**”) harmless from and against any and all damages or other amounts payable by such GCC Indemnitees, including any reasonable attorneys’ fees, taxes (including penalties and interest), and costs of litigation incurred by such Artiva Indemnitees, to the extent resulting from Claims against such Artiva Indemnitees that arise from or are based on: (i) activities of, or on behalf of GCC or GCC Subsidiaries, licensee or sublicensees (other than Artiva and its Affiliates and Sublicensees) for the development, manufacture or commercialization of any Product, that give rise to a Third Party claim against an Artiva Indemnitee; (ii) the breach of any of GCC’s obligations under this Agreement, including GCC’s representations, warranties or covenants set forth herein; or (iii) the willful misconduct or negligent acts of GCC or any of GCC Subsidiaries or any of its or their respective officers, directors, employees or agents. The foregoing indemnity obligation shall not apply to the extent that any of the Claims arises from, is based on, or results from any activity set forth in Section 8.1(a)(i), (ii), (iii), or (iv) for which Artiva is obligated to indemnify the GCC Indemnitees under Section 8.1(a).

(c) Indemnification Procedures. The Party seeking indemnification (individually, the “**Indemnified Party**”), shall promptly notify the other Party (the “**Indemnifying Party**”) in writing of the Claim. Such Claim for indemnity shall indicate the nature of the Claim and the basis therefor. Promptly after a Claim is made for which the Indemnified Party seeks indemnity, the Indemnified Party shall permit the Indemnifying Party, at its option and expense, to assume the complete defense of such Claim, *provided* that (i) the Indemnified Party will have the right to participate in the defense of any such Claim at its own cost and expense, (ii) the Indemnifying Party will conduct the defense of any such Claim with due regard for the business interests and potential related liabilities of the Indemnified Party, and (iii) the Indemnifying Party will not agree to any settlement that would admit liability on the part of the Indemnified Party or involve relief other than payment of money, without the approval of the Indemnified Party, not to be unreasonably withheld; and *provided, further*, that if it is reasonably likely that the Parties may have conflicting interests or if it is otherwise not advisable under applicable legal and ethical requirements for the Indemnifying Party’s defense counsel to represent both Parties, separate independent counsel shall be retained for each Party at its own

expense. The Indemnifying Party will not, in defense of any such Claim, except with the consent of the Indemnified Party, consent to the entry of any judgment or enter into any settlement which does not include, as an unconditional term thereof, the giving by the claimant or plaintiff to the Indemnified Party of a release from all liability in respect thereof. After notice to the Indemnified Party of the Indemnifying Party's election to assume the defense of such Claim, the Indemnifying Party shall be liable to the Indemnified Party for such legal or other expenses subsequently incurred by the Indemnified Party in connection with the defense thereof at the request of the Indemnifying Party. As to those Claims with respect to which the Indemnifying Party does not elect to assume control of the defense, the Indemnified Party will afford the Indemnifying Party an opportunity to participate in such defense at the Indemnifying Party's own cost and expense, and will not settle or otherwise dispose of any of the same without the consent of the Indemnifying Party.

8.2 Limitation of Liability. NEITHER PARTY SHALL BE LIABLE TO THE OTHER FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, PUNITIVE, OR INDIRECT DAMAGES ARISING FROM OR RELATING TO ANY BREACH OF THIS AGREEMENT, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 8.2 IS INTENDED TO OR SHALL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY UNDER SECTION 8.1 OR DAMAGES AVAILABLE FOR A PARTY'S BREACH OF CONFIDENTIALITY OBLIGATIONS IN ARTICLE 9 OF THE OPTION AGREEMENT AS APPLIED TO THIS AGREEMENT.

8.3 Insurance. Each Party shall procure and maintain insurance, including product liability insurance, with respect to its activities hereunder and which is consistent with normal business practices of prudent companies similarly situated at all times during which any Product is being clinically tested in human subjects or commercially distributed or sold. Each Party shall provide the other Party with evidence of such insurance upon request and shall provide the other Party with written notice at least [***] days prior to the cancellation, non-renewal or material changes in such insurance. It is understood that such insurance shall not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 8.

9. MISCELLANEOUS

9.1 Entire Agreement; Amendments. This Agreement, including the Exhibits hereto, any other Selected Product License Agreements and the Option Agreement, sets forth the complete, final and exclusive agreement and all the covenants, promises, agreements, warranties, representations, conditions and understandings between the Parties hereto with respect to the subject matter hereof, and supersedes all prior agreements and understandings between the Parties with respect to the subject matter hereof. There are no covenants, promises, agreements, warranties, representations, conditions or understandings, either oral or written, between the Parties other than as are set forth in this Agreement. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless reduced to writing and signed by an authorized officer of each Party.

9.2 Inclusion of Certain Terms of the Option Agreement. Save for the extent of modification or amendment effected by this Agreement, the following terms of the Option Agreement are incorporated herein *mutatis mutandis* with respect to this Agreement and will continue to apply to this Agreement even if the Option Agreement expires or terminates: Article 1 (Definitions) to the extent necessary to give meaning to terms defined therein, Article 7 (Development), Article 9 (Confidentiality), Article 13 (Dispute Resolution) (except for Section 13.5), Section 14.2 (Force Majeure), Section 14.3 (Notices), Section 14.4 (Assignment), Section 14.5 (Performance by Affiliates), Section 14.6 (Further Actions), Section 14.7 (Severability), Section 14.8 (No Waiver), Section 14.9 (Independent Contractors), Section 14.10 (Governing Law) and Section 14.11 (Construction of this Agreement).

9.3 Counterparts. This Agreement may be executed in two (2) or more counterparts, each of which shall be an original and all of which shall constitute together the same document. Counterparts may be signed and delivered by facsimile, or electronically in PDF format, each of which shall be binding when sent.

[Signature page follows.]

IN WITNESS WHEREOF, the Parties have executed this Agreement in duplicate originals by their proper officers as of the Effective Date.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan

Title: CEO

Date: 12/19/2022

GC CELL CORPORATION

By: /s/ James Park

Title: Chief Executive Officer

Date: 12.22.2022

Exhibit 1.13
Product

Product	Description
AB-205	• [***] • [***]

Exhibit 1.15
Product Patents

Title of IP	Filing No. (Date of filing)	Registration No. (Date of Registration)	Applicant
[***]	[***]	—	[***]

Exhibit 4.1(b)
Draft Development Plan

[**]

CERTAIN CONFIDENTIAL INFORMATION CONTAINED IN THIS DOCUMENT, MARKED BY [*], HAS BEEN OMITTED BECAUSE IT IS BOTH (I) NOT MATERIAL AND (II) IS THE TYPE THAT THE REGISTRANT TREATS AS PRIVATE OR CONFIDENTIAL.**

EXECUTION VERSION

COLLABORATION AGREEMENT

This **COLLABORATION AGREEMENT** (this “*Agreement*”), made as of November 1, 2022 (the “*Effective Date*”), is by and between **AFFIMED GMBH**, a German corporation (“*Affimed*”), having a primary place of business at Im Neuenheimer Feld 582, 69120 Heidelberg, Germany, and **ARTIVA BIOTHERAPEUTICS, INC.**, a Delaware corporation (“*Artiva*”), having a primary place of business at 5505 Morehouse Drive, Suite 100, San Diego, CA 92121, USA. Affimed and Artiva are each referred to herein individually as a “*Party*” and collectively the “*Parties*”.

RECITALS

WHEREAS, Affimed owns or controls the Affimed Product (as defined below), and is developing the Affimed Product for the treatment of certain tumor types;

WHEREAS, Artiva owns or controls the Artiva Product (as defined below), and is developing the Artiva Product for the treatment of certain tumor types;

WHEREAS, Affimed and Artiva entered into that certain Strategic Collaboration Agreement, dated as of November 5, 2020, and as amended on October 18, 2021 (the “*Prior Collaboration Agreement*”), pursuant to which the Parties conducted preclinical evaluation of certain combination therapies comprising Affimed’s proprietary drug candidates and the Artiva Product;

WHEREAS, Affimed and Artiva desire to further collaborate to develop a combination therapy comprising the Affimed Product and the Artiva Product and to facilitate commercialization of the Affimed Product and the Artiva Product by the respective Party for use as part of such combination therapy, as more fully described herein.

NOW, THEREFORE, in consideration of the premises and of the following mutual promises, covenants and conditions, the sufficiency of which is hereby acknowledged, the Parties, intending to be legally bound, mutually agree as follows:

1. DEFINITIONS.

As used in this Agreement, the following capitalized terms shall have the following meanings:

1.1 “Accounting Standards” means the United States Generally Accepted Accounting Principles, consistently applied throughout the organization of a Party, person, corporation, partnership or other entity.

1.2 “Affiliate” means, with respect to a particular Party or entity, any other entity that controls, is controlled by or is under common control with such Party or entity. For the purposes of this Section 1.2, the word “*control*” (including, with correlative meaning, the terms “*controlled by*” or “*under the common control with*”) means the actual power, either directly or indirectly through one (1) or more intermediaries, to direct or cause the direction of the management and policies of such Party or entity, whether by the ownership of more than fifty percent (50%) of the voting stock of such Party or entity, or by contract or otherwise.

1.3 “Affimed Background Know-How” means any and all Know-How Controlled by Affimed or its Affiliates as of the Effective Date or during the Term that [***].

1.4 “**Affirmed Background Patents**” means any and all Patents Controlled by Affirmed or its Affiliates as of the Effective Date or during the Term in the Territory that Cover [***]. The Affirmed Background Patents existing as of the Effective Date are set forth in Exhibit 1.4.

1.5 “**Affirmed Background Technology**” means Affirmed Background Patents and Affirmed Background Know-How.

1.6 “**Affirmed Indemnities**” has the meaning set forth in Section 14.2.

1.7 “**Affirmed Inventions**” has the meaning set forth in Section 10.1(b)(ii).

1.8 “**Affirmed Patents**” has the meaning set forth in Section 10.2(a).

1.9 “**Affirmed Product**” means the product described in Exhibit 1.9, referred to by Affirmed as AFM13.

1.10 “**Affirmed Product Clinical Data**” means [***].

1.11 “**Agreed BD Disclosures**” has the meaning set forth in Section 3.1(b).

1.12 “**Agreed Disclosures**” has the meaning set forth in Section 3.1(b).

1.13 “**Agreed IR Disclosures**” has the meaning set forth in Section 3.1(b).

1.14 “**Agreed Value**” has the meaning set forth in Section 9.2(c).

1.15 “**Agreement Payments**” has the meaning set forth in Section 9.2(a).

1.16 “**Agreement Payments Term**” means, on a country-by-country basis, the period starting on the First Commercial Sale of any In-Scope Artiva Sale or In-Scope Affirmed Sale in such country and ending on the earlier of (A) the launch of a Biosimilar Product for the Artiva Product or Affirmed Product in the Territory and (B) the later of (i) expiration of the last-to-expire Joint Collaboration Patent in such country, and (ii) expiration of regulatory data exclusivity for either the Artiva Product or Affirmed Product in such country.

1.17 “**Alliance Manager**” has the meaning set forth in Section 3.6.

1.18 “**APAC Countries**” means the following countries: China (including Hong Kong and Macau), Japan, Mongolia, North Korea, South Korea, Taiwan, Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Vietnam, Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, Australia and New Zealand.

1.19 “**Applicable Laws**” means all federal, state, local, national, regional, supranational, and multinational statutes, laws, rules, regulations and orders applicable to a Party’s performance in connection with this Agreement, including all relevant data protection and privacy laws and regulations, cGMP, GCP, applicable guidelines of the ICH (including ICH Topic E8 (General Considerations for Clinical Studies)), the FD&C Act, as well as all relevant antitrust/competition laws (each to the extent applicable to a Party’s performance in connection with this Agreement).

1.20 “**Artiva Background Know-How**” means any and all Know-How Controlled by Artiva or its Affiliates as of the Effective Date or during the Term [***].

1.21 “**Artiva Background Patents**” means any and all Patents Controlled by Artiva or its Affiliates as of the Effective Date or during the Term [***].

1.22 “**Artiva Background Technology**” means Artiva Background Patents and Artiva Background Know-How.

1.23 “Artiva Indemnites” has the meaning set forth in Section 14.1.

1.24 “Artiva Product” means the product described in Exhibit 1.24, referred to by Artiva as AB-101.

1.25 “Artiva Product Clinical Data” means [***].

1.26 “Artiva Product Inventions” has the meaning set forth in Section 10.1(b)(i).

1.27 “Artiva Product Patents” has the meaning set forth in Section 10.2(a).

1.28 “Bankruptcy Code” has the meaning set forth in Section 15.3.

1.29 “Bankruptcy Event” has the meaning set forth in Section 15.3.

1.30 “Biosimilar Product” means, with respect to a particular Product that has received Regulatory Approval for a particular Indication in a country or jurisdiction in the Territory and is being marketed and sold by a Party or any of its Affiliates or licensees in the applicable country, a biologic product that [***].

1.31 “Business Day” means a day that is not a Saturday, Sunday or a day on which commercial banking institutions in California, USA or Germany are authorized or required by Applicable Law to remain closed.

1.32 “Buy Down Amount” means [***].

1.33 “Calendar Quarter” means a period of three (3) calendar months commencing on January 1 (Q1), April 1 (Q2), July 1 (Q3) or October 1 (Q4), except that the first Calendar Quarter of the Term shall commence on the Effective Date and end on the day immediately prior to the first to occur of January 1, April 1, July 1 or October 1 after the Effective Date, and the last Calendar Quarter shall end on the last day of the Term.

1.34 “Calendar Year” means a period of twelve (12) calendar months commencing on January 1 and ending on December 31, except that the first Calendar Year of the Term shall commence on the Effective Date and end on December 31 of the year in which the Effective Date occurs and the last Calendar Year of the Term shall commence on January 1 of the year in which the Term ends and end on the last day of the Term.

1.35 “CD30” means the target known as Cluster of Differentiation 30, also referred to as TNFRSF8.

1.36 “cGMP” means the current good manufacturing practices officially published and interpreted by EMA, FDA and other applicable Regulatory Authorities that may be in effect from time to time and are applicable to the Manufacture of the Products.

1.37 “Change of Control” means, with respect to a Party, that: (a) any Third Party (or group of Third Parties acting in concert) acquires directly or indirectly the beneficial ownership of any voting security of such Party, or if the percentage ownership of such Third Party (or group of Third Parties acting in concert) in the voting securities of such Party is increased through stock redemption, cancellation, or other recapitalization, and immediately after such acquisition or increase such Third Party is, directly or indirectly, the beneficial owner of voting securities representing more than fifty (50%) of the total voting power of all of the then outstanding voting securities of such Party; (b) a merger, consolidation, recapitalization, or reorganization of such Party is consummated which results in stockholders or equity holders of such Party immediately prior to such transaction, no longer owning at least fifty (50%) of the outstanding voting securities of the surviving entity (or its parent entity) immediately following such transaction; or (c) there is a sale or transfer to a Third Party of all or substantially all of such Party’s consolidated assets taken as a whole, through one or more related transactions.

1.38 “Change of Control Group” means, with respect to a Party, the Third Party acquirer of, or successor to, such Party in connection with a Change of Control of such Party, together with all of the Affiliates of such Third Party acquirer or successor, in each case, that are not such Party or Affiliates of such Party immediately prior to the closing of such Change of Control.

1.39 “**Clinical Demand Plan**” has the meaning set forth in Section 8.1(a).

1.40 “**Clinical Trial**” means a Phase I Clinical Trial, Phase II Clinical Trial, Pivotal/Registrational Trial, or Phase III Clinical Trial, or any other trial in which any product is administered to a human subject. For clarity, Clinical Trial includes any confirmatory studies that may be required by the FDA in connection with FDA’s accelerated approval.

1.41 “**CMC**” means chemistry, manufacturing and controls.

1.42 “**Combination Therapy**” means the combination therapy of the Artiva Product and the Affirmed Product, [***].

1.43 “**Combination Therapy Clinical Data**” means all data (including raw data) and results generated under any Combination Therapy Trial, including in each case all Artiva Product Clinical Data and Affirmed Product Clinical Data, but excluding all Personal Information for which a valid patient consent permitting the sharing of such information for the particular purpose has not been obtained.

1.44 “**Combination Therapy Promotion Plan**” has the meaning set forth in Section 7.2(a).

1.45 “**Combination Therapy Trial**” means each Clinical Trial designed to evaluate the Combination Therapy as agreed by the Parties under this Agreement. For clarity, Combination Therapy Trial includes any Confirmatory Combination Therapy Trial, unless otherwise specified in this Agreement.

1.46 “**Commercialize**” or “**Commercialization**” means, with respect to a Product, activities directed to the preparation for sale or sale of such Product, including activities related to marketing, promoting, detailing, distributing, importing, exporting, launching, selling or offering to sell, or seeking to obtain reimbursement for, such Product, whether before or after Regulatory Approval for the Combination Therapy has been obtained.

1.47 “**Commercially Reasonable Efforts**” means, with respect to a Party performing activities under this Agreement, those efforts and resources [***].

1.48 “**Committee**” means the JEC, JSC, JCC, JDC or any sub-committee established by the JSC, as applicable.

1.49 “**Competing Product**” has the meaning set forth in Section 4.3(e).

1.50 “**Confidential Information**” has the meaning set forth in Section 11.1.

1.51 “**Confirmatory Combination Therapy Trial**” means a confirmatory Clinical Trial (or portion of a Clinical Trial, as described below) required by the FDA as a condition for granting accelerated approval under 21 C.F.R. §601 Subpart E for the Combination Therapy in a particular Indication, whereby such confirmatory Clinical Trial is required for the Combination Therapy to satisfy post-marketing requirements for Regulatory Approval from the FDA, and failure to satisfy such post-marketing requirements may cause the FDA to withdraw its prior accelerated approval. For the sake of clarity, a Confirmatory Combination Therapy Trial may be an extension to an ongoing pre-registrational Combination Therapy Trial for accelerated approval.

1.52 “**Confirmatory Combination Therapy Trial Activities**” means the activities in a Confirmatory Combination Therapy Trial required by the FDA as a condition for accelerated approval of the Combination Therapy in a particular Indication [***].

1.53 “**Confirmatory Combination Therapy Trial Budget**” means a budget specifically for costs of performing the Confirmatory Combination Therapy Trial Activities, as mutually agreed by the Parties.

1.54 “Control” or “Controlled” means (a) with respect to Patents or Know-How, the ownership of or possession by a Party of the ability to use, practice, license or otherwise exploit such Patents or Know-How as provided herein (without taking into account any rights granted under Patents or Know-How by one Party to the other Party pursuant to this Agreement) without violating the terms of any agreement or arrangement between such Party and any Third Party pursuant to which such Patents or Know-How were licensed, acquired or generated and (b) with respect to proprietary materials, the ownership of or possession by a Party of the ability to use, supply to the other Party or otherwise exploit such proprietary materials as provided herein (without taking into account any rights granted to materials by one Party to the other Party pursuant to this Agreement) without violating the terms of any agreement or arrangement between such Party and any Third Party, pursuant to which such proprietary materials were acquired or generated. To the extent the use, practice, license, supply to the other Party or other exploitation of any Patents, Know-How or proprietary materials requires any payments to Third Parties, such Patents, Know-How or proprietary materials shall only be deemed “Controlled” by such Party if they have been licensed, acquired or generated (i) before the Effective Date, or (ii) after the Effective Date, but in case of (ii) only upon the mutual agreement of the Parties (including on the bearing of respective costs) which shall, in case of any Patents, Know-How or proprietary materials which are necessary for the performance of either Parties’ activities or responsibilities under the Development Plan or this Agreement, not be unreasonably withheld. In the event a Change of Control of a Party after the Effective Date, any Patents, Know-How or materials owned or licensed by any of the Change of Control Group members shall not be deemed “Controlled” by such Party except to the extent such Patent, Know-How or material is also Controlled prior to such transaction by such Party or its Affiliate immediately prior to the closing of such Change of Control.

1.55 “Cover” means, with respect to a particular subject matter at issue and a relevant Patent, that, in the absence of ownership of or a license under such Patent, the manufacture, use, sale, offer for sale, or importation of such subject matter would infringe one or more claims of such Patent, or, as to a pending claim included in such Patent, the manufacture, use, sale, offer for sale, or importation of such subject matter would infringe such Patent if such pending claim were to issue in an issued patent.

1.56 “Debarment” or “Debarred” means (a) being debarred, or being subject to a pending debarment, pursuant to section 306 of the FD&C Act, 21 U.S.C. § 335a, (b) being listed by any federal or state agencies as excluded, debarred, suspended or otherwise made ineligible to participate in federal or state healthcare programs or federal procurement or non-procurement programs (as that term is defined in 42 U.S.C. § 1320a-7b(f)), or being subject to any pending process by which any such listing, exclusion, debarment, suspension or other ineligibility could occur, (c) being disqualified by any foreign government or regulatory agency from performing specific services, or being subject to a pending disqualification proceeding or (d) being convicted of or pleading nolo contendere to a criminal offense related to the provision of healthcare items or services or being subject to any pending criminal action related to the provision of healthcare items or services.

1.57 “Demand Projections” has the meaning set forth in Section 8.1(a).

1.58 “Develop” or “Development” means, with respect to a Product or the Combination Therapy, as applicable, research, preclinical development, clinical development, and regulatory activities with respect to such Product or Combination Therapy, including test method development and stability testing, design, compatibility testing, toxicology, animal efficacy studies, formulation, quality assurance and quality control development, statistical analysis, clinical studies (including Clinical Trials, Combination Therapy Trials, the Confirmatory Combination Therapy Trial and any Confirmatory Combination Therapy Trial Activities), regulatory affairs, Regulatory Approval (including the preparation and submission of applications for such Regulatory Approval) and registration, manufacturing development, packaging development and manufacturing and development documentation efforts in support of development activities anywhere in the world, whether before or after Regulatory Approval for such Product or Combination Therapy has been obtained.

1.59 “Development Budget” means [***].

1.60 “Development Plan” has the meaning set forth in Section 5.1(a).

1.61 “Disclosing Party” has the meaning set forth in Section 11.2(a).

1.62 “Dispute” has the meaning set forth in Section 17.1.

1.63 “EMA” means the European Medicines Agency and any successor agency thereto.

1.64 “EU” means, at any given time during the Term, the then-current member states of the European Union.

1.65 “Europe” means, for purposes of this Agreement, the EU and United Kingdom.

1.66 “Executive Officers” means the Chief Executive Officer, Chief Operating Officer and Chief Legal Officer of Artiva and Chief Executive Officer, Chief Business Officer, Chief Financial Officer, Chief Operating Officer, Chief Medical Officer and Chief Scientific Officer of Affirmed.

1.67 “FD&C Act” means the United States Federal Food, Drug and Cosmetic Act, as may be amended from time to time, any successor legislation and any corresponding foreign laws, together with any rules, regulations and requirements promulgated thereunder (including all additions, supplements, extensions, and modifications thereto).

1.68 “FDA” means the U.S. Food & Drug Administration and any successor agency thereto.

1.69 “Field” means any and all uses in humans or animals.

1.70 “First Commercial Sale” means, with respect to any sales of a Product in the Field in a particular country or jurisdiction in the Territory, the first arm’s length commercial sale of such Product for monetary value by a Party or any of its Affiliates or licensees of the Product to a Third Party for end use or consumption by the general public in such country or jurisdiction after the applicable Regulatory Authority in such country or jurisdiction has granted Regulatory Approval of the Combination Therapy (whereas, for clarity, the First Commercial Sale may occur before pricing or reimbursement approvals have been granted); *provided* that the following shall not constitute a First Commercial Sale: (a) any sale to an Affiliate or licensee for resale; and (b) compassionate use or named patient sales.

1.71 “FTE” means the equivalent of the work of a full-time individual for a twelve (12) month period (consisting of a total of [***] hours per year).

1.72 “FTE Costs” means, for any period, the FTE Rate multiplied by the number of FTEs in such period utilized by a Party or its Affiliates arising out of or relating to the performance of the Confirmatory Combination Therapy Trial Activities. FTEs will be pro-rated on a daily basis if necessary.

1.73 “FTE Rate” means [***] per year, subject to adjustments on an annual basis as of January 1 of each year, beginning in 2024, by factors which reflect (i) with respect to FTEs located in the US, any change in the applicable employment cost index, as reported by the U.S. Bureau of Labor Statistics, and (ii) with respect to FTEs located in the EU, any change in the European Union Labour Cost Index (LCI) as reported by Eurostat, in each case (i) and (ii) for January 1 of such year when compared to the comparable statistics for January 1 of the preceding year.

1.74 “GCC” means GC Cell Corporation, and any successor thereto.

1.75 “GCP” means the Good Clinical Practices officially published by EMA, FDA and the ICH that may be in effect from time to time and are applicable to the testing of the Products.

1.76 “Healthcare Laws” means Applicable Laws related to any arrangement involving any items or services paid for by federal health care programs, commercial insurance and/or any drug approved or cleared by FDA,, including, without limitation the FD&Act (21 U.S.C. §§ 301 et seq.), the U.S. federal Anti-Kickback Statute (42 U.S.C. § 1320a-7b(b)) and its implementing regulations, the civil False Claims Act (31 U.S.C. §§ 3729 et seq.), the federal False Statements Law (42 U.S.C. § 1320a-7b(a)), the Civil Monetary Penalties Law (42 U.S.C. §1320a-7a), all criminal laws relating to health care fraud and abuse, including but not limited to 18 U.S.C. §§286 and 287, the exclusions law (42 U.S.C. §1320a-7), and all other government funded or sponsored healthcare programs, the U.S. Physician Payments Sunshine Act (42 U.S.C. § 1320a-7h), the laws governing the U.S. Medicare Program (Title XVIII of the U.S. Social Security Act) including Medicare price reporting (42 U.S.C. § 1395w-3a), the U.S. Medicaid Program (Title XIX of the U.S. Social Security Act) including the collection and reporting requirements and the processing of any applicable rebate, chargeback or adjustment thereunder and under any state supplemental rebate program and the U.S. 340B drug pricing program (42 U.S.C. § 256b), and any state laws or foreign equivalents analogous to any of the foregoing.

1.77 “**ICF**” has the meaning set forth in Section 5.6.

1.78 “**ICH**” means the International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use.

1.79 “**IL-2 Product**” means the interleukin 2 cytokine in the form of Proleukin (aldesleukim) to be supplied by Artiva to Affimed for use in the Combination Therapy Trials under this Agreement.

1.80 “**Innate Cell Engager Technology**” means any bi-, tri- or multi-specific, engineered antibody construct, designed to engage innate immune cells (e.g., NK Cells) via innate immune cell specific cell surface receptors (e.g., CD16A) and to induce thereby the killing of specifically targeted cancer cells.

1.81 “**In-Scope Affirmed Adjusted Revenue**” means the definition of “In-Scope Artiva Adjusted Revenue” as applied to sales of the Affirmed Product, *mutatis mutandis*.

1.82 “**In-Scope Affirmed Sales**” means any sales of the Affirmed Product in the Territory generated by prescription of the Combination Therapy as determined by tracking of sales pursuant to Section 9.2(a). [***].

1.83 “**In-Scope Artiva Adjusted Revenue**” means the gross amounts invoiced by Artiva and its Affiliates and licensees of the Artiva Product (each, a “**Selling Party**”) to Third Party customers only for In-Scope Artiva Sales, less the following deductions actually incurred, allowed, taken, paid, accrued or allocated with respect to such In-Scope Artiva Sales for:

- (a) [***];
- (b) [***];
- (c) [***]; and
- (d) [***].

All such deductions shall be determined in accordance with the Selling Party’s Accounting Standards. In no event shall any particular amount identified above be deducted more than once in calculating In-Scope Artiva Adjusted Revenue (*i.e.*, no “double counting” of deductions).

In-Scope Artiva Adjusted Revenue shall not include transfers or dispositions of the Artiva Product in connection with the Combination Therapy for charitable, promotional, pre-clinical, clinical, regulatory, or governmental purposes, to the extent provided without charge or sold for no more than the manufacturing costs thereof. In-Scope Artiva Adjusted Revenue shall include the amount or fair market value of all consideration received by the Selling Party in respect of such Artiva Product, whether such consideration is in cash, payment in kind, exchange or other form. In-Scope Artiva Adjusted Revenue shall not include sales between or among the Selling Parties, but shall include the subsequent re-sales to a Third Party.

1.84 “**In-Scope Artiva Sales**” means any sales of the Artiva Product in the Territory generated by prescription of the Combination Therapy as determined by tracking of sales pursuant to Section 9.2(a). [***].

1.85 “**In-Scope Adjusted Revenue**” means either the In-Scope Artiva Adjusted Revenue or the In-Scope Affirmed Adjusted Revenue, as applicable.

1.86 “**IND**” means an investigational new drug application, clinical trial application, clinical trial exemption, or similar application or submission filed with or submitted to a Regulatory Authority in a jurisdiction that is necessary to commence human clinical trials in such jurisdiction, including any such application filed with the FDA as described in 21 C.F.R. §312.

1.87 “**Indemnatee**” has the meaning set forth in Section 14.3.

1.88 “**Indemnitor**” has the meaning set forth in Section 14.3.

1.89 “**Indication**” means a human disease, disorder or medical condition that is [***].

1.90 “**Infringement**” has the meaning set forth in Section 10.3(a).

1.91 “**Initial Territory**” has the meaning set forth in Section 1.141.

1.92 “**Inventions**” means all inventions and discoveries, whether or not patentable, which are made, conceived, or first reduced to practice by or on behalf of a Party or by or on behalf of the Parties together in the performance or as a result of the Combination Therapy Trials or activities under the Development Plan.

1.93 “**Joint Background Know-How**” means the Know-How within or comprising the Joint IP (as defined in the Prior Collaboration Agreement).

1.94 “**Joint Background Patents**” means the Joint Patent Rights (as defined in the Prior Collaboration Agreement). The Joint Background Patents existing as of the Effective Date are set forth in Exhibit 1.94.

1.95 “**Joint Collaboration Inventions**” has the meaning set forth in Section 10.1(b)(iii).

1.96 “**Joint Collaboration Patents**” has the meaning set forth in Section 10.1(b)(iii).

1.97 “**Joint Commercialization Committee**” or “**JCC**” has the meaning set forth in Section 3.3(a).

1.98 “**Joint Executive Committee**” or “**JEC**” has the meaning set forth in Section 3.1.

1.99 “**Joint Patents**” means Joint Background Patents and Joint Collaboration Patents.

1.100 “**Joint Steering Committee**” or “**JSC**” has the meaning set forth in Section 3.2(a).

1.101 “**Joint Technology**” means Joint Background Know-How, Joint Collaboration Inventions and Joint Patents.

1.102 “**Know-How**” means any non-public invention, innovation, improvement, development, discovery, computer program, model, algorithm, device, trade secret, method, know-how, formulation, formula, process, technique, information, results, or data, including manufacturing, use, process, structural, operational and other data and information, whether or not written or otherwise fixed in any form or medium, regardless of the media on which contained and whether or not patentable or copyrightable, but excluding any Patents.

1.103 “**Later Imposed Withholding**” has the meaning set forth in Section 9.4(b).

1.104 “**Losses**” has the meaning set forth in Section 14.1.

1.105 “**Manufacture**”, “**Manufactured**” or “**Manufacturing**” means all stages of the manufacture of a Product (whether for commercial or clinical purposes), including planning, purchasing, manufacture, processing, compounding, storage, filling, packaging, waste disposal, labeling, leafleting, testing, quality assurance, sample retention, stability testing, release, dispatch and supply, as applicable.

1.106 “**Materials**” has the meaning set forth in Section 5.11(a).

1.107 “MDACC Study” has the meaning set forth in Section 4.3(b).

1.108 “NK Cell” means natural killer cell.

1.109 “Non-Program Inventions” has the meaning set forth in Section 10.1(c).

1.110 “Option Territory” means any of the following groups of countries or jurisdictions, in all cases excluding the Initial Territory and all APAC Countries: (a) Europe, (b) Latin America, (c) North America, (d) Middle East, (e) Africa, and (f) countries and jurisdictions outside of the countries and jurisdictions in clauses (a) through (e); [***].

1.111 “Out-of-Pocket Expenses” means reasonable and documented amounts paid by or on account of a Party to any Third Party, including vendors, consultants, or contractors, for services reasonably necessary and identifiable to the performance of the Confirmatory Combination Therapy Trial Activities. For clarity, “**Out-of-Pocket Expenses**” does not include payments for a Party’s or its Affiliates’ employee salaries, benefits, utilities, travel expenses, general office supplies, insurance, information technology or capital expenditures.

1.112 “Patents” means (a) any and all patents, certificates of invention, applications for certificates of invention, priority patent filings, and patent applications, and (b) any and all renewals, divisions, continuations (in whole or in part), or requests for continued examination of any of such patents, certificates of invention and patent applications, and any and all patents or certificates of invention issuing thereon, and any and all reissues, reexaminations, extensions, supplementary protection certificates, divisions, renewals, substitutions, confirmations, registrations, revalidations, revisions, and additions of or to any of the foregoing.

1.113 “Patent Budget” has the meaning set forth in Section 10.2(b)(i).

1.114 “Paying Party” has the meaning set forth in Section 9.4(b)(i).

1.115 “Personal Information” means, in addition to any definition for any similar term (e.g., “personal data” or “personal health information” or “personally identifiable information” or “PII”) provided by Applicable Laws, or by either Party in any of its own privacy policies, notices or contracts, all information that identifies, could be used to identify or is otherwise associated with an individual person, whether or not such information is directly associated with an identified individual person.

1.116 “Pharmacovigilance Agreement” means that certain pharmacovigilance agreement being entered into by the Parties pursuant to Section 6.4, as amended from time to time.

1.117 “Phase I Clinical Trial” means a human clinical trial that would satisfy the requirements of 21 C.F.R. §312.21(a) (or the comparable requirements of the relevant Regulatory Authority in a country other than the Initial Territory, as applicable).

1.118 “Phase II Clinical Trial” means a human clinical trial would satisfy the requirements of 21 C.F.R. §312.21(b) (or the comparable requirements of the relevant Regulatory Authority in a country other than the Initial Territory, as applicable).

1.119 “Phase III Clinical Trial” means a human clinical trial would satisfy the requirements of 21 C.F.R. §312.21(c) (or the comparable requirements of the relevant Regulatory Authority in a country other than the Initial Territory, as applicable).

1.120 “Pivotal/Registrational Trial” means either (a) a human clinical trial, the principal purpose of which is to demonstrate clinically and statistically the efficacy and safety of a product for one (1) or more Indication(s) in order to obtain Regulatory Approval of such product for such Indication(s), as further defined in 21 C.F.R. §312.21 (or the comparable regulations of the relevant Regulatory Authority in a country other than the Initial Territory, as applicable) or (b) a human clinical trial of a product on a sufficient number of subjects that satisfies both clauses (i) and (ii): (i) such trial is designed to establish that a product has an acceptable safety and efficacy profile for its intended

use, and to determine warnings, precautions, and adverse reactions that are associated with such product in the dosage range to be prescribed, which trial is intended to support Regulatory Approval of such product; and (ii) such trial is a registrational trial that, if successful, would be sufficient to support the filing of an application for Regulatory Approval for such product in the United States or the EU, as evidenced by (A) an agreement with or statement from the FDA or the EMA on a ‘Special Protocol Assessment’ or equivalent, or (B) other guidance or minutes issued by the FDA or EMA, for such registrational trial, in each case (of (a) and (b)), regardless of whether the sponsor of such trial identifies, characterizes or refers to such trial as a “Phase 3,” “Phase 2b” or “Phase 2b/3” trial (or otherwise) in the applicable protocol, on clinicaltrials.gov, or in any other context.

1.121 “Prior Collaboration Agreement” has the meaning set forth in the recitals.

1.122 “Products” means, collectively, the Artiva Product and the Affirmed Product. A **“Product”** means either the Artiva Product or the Affirmed Product, as applicable.

1.123 “Promote” or “Promotion” means, with respect to the Combination Therapy, activities directed to the marketing, promoting or detailing such Combination Therapy in any Indication in the Field in the Territory following Regulatory Approval for the Combination Therapy in such Indication.

1.124 “Promotional Materials” means all written, printed, graphic, electronic, audio or video matter, including journal advertisements, sales visual aids, leave items, formulary binders, reprints, direct mail, direct-to-consumer advertising, internet postings, and broadcast advertisements, in each case, created by a Party or on its behalf and used or intended for use by or on behalf of such Party in connection with Commercialization of its Product or the Promotion of the Combination Therapy in the Field in the Territory.

1.125 “Prosecution and Maintenance” means, with regard to a given Patent, the preparation, filing, prosecution and maintenance of such Patent, as well as any ex parte and inter partes proceedings, including reexaminations, reissues, applications for patent term extensions, interferences, derivation proceedings, post grant review proceedings, oppositions, litigations, arbitrations and other similar proceedings with respect to such Patent.

1.126 “Protocol” has the meaning set forth in Section 5.5.

1.127 “Publication” has the meaning set forth in Section 12.2(b).

1.128 “Quality Agreement” has the meaning set forth in Section 5.13.

1.129 [*]**.

1.130 “Receiving Party” has the meaning set forth in Section 11.2(a).

1.131 “Recipient Party” has the meaning set forth in Section 9.4(b)(i).

1.132 “Regulatory Approvals” means any and all permissions (other than the Manufacturing, pricing and reimbursement approvals) required to be obtained from the relevant Regulatory Authorities and any other competent governmental authority for the Commercialization of any Product or the Promotion of the Combination Therapy in a given country or regulatory jurisdiction in the Territory.

1.133 “Regulatory Authority” means any national, supra-national, regional, state or local regulatory agency, department, bureau, commission, council or other governmental entity in any country or territory of the world with jurisdiction over the Development, Manufacture or Commercialization of a Product or Development or Promotion of the Combination Therapy, including the FDA and the EMA.

1.134 “Regulatory Materials” means regulatory applications, submissions, notifications, correspondences, registrations, INDs, Regulatory Approvals or other filings made to or with, or other approvals granted by, a Regulatory Authority that are necessary or reasonably desirable in order to Develop, Manufacture or Commercialize a Product or Develop or Promote the Combination Therapy in a particular country or regulatory jurisdiction in the Territory.

1.135 “**Related Agreements**” means the Pharmacovigilance Agreement and the Quality Agreement.

1.136 “**SAEs**” means serious adverse events.

1.137 “**Samples**” means biological samples, such as urine, blood and tissue samples, collected from patients participating in a Combination Therapy Trial.

1.138 “**SEC**” means the U.S. Securities and Exchange Commission and any successor agency thereto.

1.139 “**Selling Party**” has the meaning set forth in Section 1.79.

1.140 “**Term**” has the meaning set forth in Section 15.1.

1.141 “**Territory**” means the United States and its territories and possessions (the “**Initial Territory**”) and each Option Territory (if any) that the Parties agree to include in rights granted under this Agreement in accordance with Section 2.2.

1.142 “**Third Party**” means any person or entity other than Affirmed, Artiva or their respective Affiliates.

1.143 “**Third Party Claim**” has the meaning set forth in Section 14.1.

1.144 “**Unanimous Matter**” has the meaning set forth in Section 3.5(a).

1.145 “**VAT**” means any value added, sales, goods, services, turnover, consumption, use or similar tax, including value added tax as may be levied by any member state of the EU on the basis of Directive 2006/112/EC (as amended from time to time) and comparable taxes under the laws of any other jurisdiction outside the EU (for the avoidance of doubt, excluding income or net profit taxes or franchise taxes of any kind).

2. OVERVIEW; TERRITORY EXPANSION

2.1 Overview. Subject to the terms and conditions of this Agreement, the Parties shall collaborate to conduct Development of the Combination Therapy in the Field in the Territory, and the Parties will Commercialize their respective Products for the Combination Therapy in the Field in the Territory. To the extent mutually agreed in the Development Plan, certain Development activities may be conducted outside the Territory (but only for the purpose of seeking Regulatory Approval and Commercialization in the Territory), and all references in this Agreement to Development in the Territory shall be construed accordingly.

2.2 Territory Expansion. At any time during the Term, upon receipt of a written notice from Affirmed by Artiva requesting expansion of the Territory to include any of the Option Territory(ies), the Parties shall discuss in good faith any amendment to this Agreement as necessary to include such Option Territory(ies) in the Territory, including any additional Clinical Trials as may be required by the applicable Regulatory Authority in such Option Territory(ies); *provided* that such amendment shall not materially change any payment obligations of either Party to the other Party under this Agreement except as otherwise agreed in writing by the Parties.

3. GOVERNANCE

3.1 Joint Executive Committee.

(a) Within [***] days after the Effective Date, the Parties shall establish a joint executive committee (the “**Joint Executive Committee**” or “**JEC**”). The JEC shall consist of (i) the Chief Executive Officer and (ii) the Chief Business Officer or Chief Operating Officer of either Party. The JEC shall (a) discuss and coordinate on corporate and strategic topics relating to the Combination Therapy that require alignment between the Parties, (b) review, discuss and resolve any matter within the decision-making authority of the JSC or the JCC on which the JSC or the JCC cannot reach consensus pursuant to Section 3.5(a), and (c) agree and coordinate on timing and venue of all public disclosures related to the Combination Therapy, including release of Combination Therapy Clinical Data,

descriptions of the Combination Therapy, publication strategies pertaining to the Combination Therapy (e.g., press releases or corporate presentations), and any required disclosures and filings a Party may be obligated to make under Applicable Law with the SEC or other similar governmental authorities, provided that the foregoing shall not limit each Party's right to make such required disclosures and filings in accordance with Section 11.3.

(b) Within [***] days after the Effective Date, the Parties shall establish a joint disclosure committee as a subcommittee of the JEC (the "**Joint Disclosure Committee**" or "**JDC**"). The JDC shall consist of the Chief Executive Officer as well as other senior executives and internal and/or external legal counsels of both Parties as each Party deems appropriate, including SEC counsel where relevant. The JDC shall :

(i) review and agree as to the scope of unpublished Combination Therapy Clinical Data that are pre-approved to be disclosed by each Party to (i) *bona fide* potential or actual investors or financial partners (such agreed and pre-approved disclosures, the "**Agreed IR Disclosures**"), or (ii) *bona fide* potential or actual acquirers, merger partners or business partners (including potential licensing partners) (such agreed and pre-approved disclosures, the "**Agreed BD Disclosures**", and the Agreed IR Disclosures and Agreed BD Disclosures together the "**Agreed Disclosures**"), in each case of (i) and (ii) in accordance with Section 11.3(e); and

(ii) receive notifications of (and review where applicable) any disclosures to potential or actual investors or financial partners or to potential or actual acquirers, merger partners or business partners (including potential licensing partners) beyond the Agreed Disclosures according to Section 11.3(e)).

(c) The JDC shall document its decisions and strategies in a disclosure plan that shall be updated at least on a quarterly basis.

3.2 Joint Steering Committee.

(a) **Formation.** Within [***] days after the Effective Date, the Parties shall establish a joint steering committee (the "**Joint Steering Committee**" or "**JSC**"). The JSC shall consist of [***] representatives from each Party, and each representative shall have the requisite experience and seniority to enable such person to make decisions on behalf of the applicable Party with respect to the issues falling within the authority of the JSC. From time to time, each Party may substitute one (1) or more of its representatives to the JSC upon written notice to the other Party.

(b) **Responsibilities of the JSC.** The JSC shall perform the following functions:

(i) oversee, guide and approve the overall strategic direction of the Parties' collaboration with respect to Development of the Combination Therapy (but without modifying or limiting the rights or obligations of either Party as otherwise set forth herein);

(ii) review and approve the Development Plan, including any updates or amendments thereto, in accordance with Section 5.1;

(iii) oversee, review and coordinate the conduct, implementation and progress of the Development activities with respect to the Combination Therapy under this Agreement, as described in the applicable Development Plan;

(iv) review and approve the final ICF according to Section 5.6;

(v) discuss strategy and regulatory pathway for obtaining Regulatory Approval for the Combination Therapy;

(vi) review and approve the Protocols including any updates or amendments thereto;

(vii) consider information provided by either Party pursuant to Section 5.12 with respect to a Third Party subcontractor which that Party wishes to newly involve in the conduct of activities in connection with a Combination Therapy Trial;

(viii) review and coordinate the supply of the Products for the Development of the Combination Therapy under this Agreement in accordance with the Development Plan and Article 8;

(ix) review and approve the contents of the initial publication of the Combination Therapy Clinical Data generated in a Combination Therapy Trial pursuant to Section 12.2(a), in accordance with the guidelines (including timing and venue) agreed by the JEC;

(x) exchange information with respect to each Party's activities with respect to the Development of such Party's Product as relevant to the Development of the Combination Therapy pursuant to this Agreement;

(xi) review on a quarterly basis the Combination Therapy Clinical Data;

(xii) review on a quarterly basis the actual expenditures for the Confirmatory Combination Clinical Trial against the Confirmatory Combination Therapy Trial Budget and discuss any expected overages in accordance with Section 5.4;

(xiii) establish, as appropriate, additional sub-committees responsible for managing specific aspects of the Parties' collaboration as contemplated herein;

(xiv) oversee and supervise any subcommittees the JSC may establish as necessary and resolve issues or dispute elevated to it by any such subcommittee; and

(xv) perform such other functions as are assigned to the JSC in this Agreement, or otherwise delegated to the JSC by the JEC (within the authority of the JEC) or agreed by the Parties in writing.

3.3 Joint Commercialization Committee.

(a) Formation. Prior to filing of the first application for Regulatory Approval for the Combination Therapy, the Parties shall establish a joint commercialization committee (the "**JCC**"). The JCC shall consist of [***] representatives from each Party, and each representative shall have the requisite experience and seniority to enable such person to make decisions on behalf of the applicable Party with respect to the issues falling within the authority of the JCC. From time to time, each Party may substitute one (1) or more of its representatives to the JCC upon written notice to the other Party.

(b) Responsibilities of JCC. The JCC shall perform the following functions:

(i) oversee and coordinate the overall strategic direction of the Promotion of the Combination Therapy in accordance with Article 7 (but without modifying or limiting the rights or obligations of either Party as otherwise set forth herein);

(ii) review and discuss the Combination Therapy Promotion Plan and any material updates or amendments thereto, in accordance with Section 7.2;

(iii) review the Promotional Materials for the Combination Therapy generated by Affirmed pursuant to Section 7.3(c)(ii) and, only to the extent the Promotional Materials contain statements relating to the Artiva Product (e.g., relating to its efficacy, safety or use) as a monotherapy or as part of the Combination Therapy (and not the Affirmed Product), approve such statements within such Promotional Materials (but no other aspect of such Promotional Materials such as layout and design), taking into account any guidance and assessments presented by functional representatives of either Party (who may attend the respective JCC meeting in accordance with Section 3.4), *provided that* the review and, if applicable, approval process shall be completed in any event within ten (10) Business Days from the date the Promotional Materials are submitted to the JCC;

(iv) review and approve each Party's use of the other Party's trademarks, logos, Promotional Materials, trade dress, copyrights, corporate logos, corporate names, visual identity and branding elements, in each case, in connection with the Promotion of the Combination Therapy as set forth in Section 7.3(c)(iv);

(v) review and discuss, as necessary, the Demand Projection in accordance with Section 8.1(a), the In-Scope Adjusted Revenue Tracking Methodology as set forth in Section 9.2(a), and the Agreement Payment as set forth in Section 9.2(c);

(vi) exchange information with respect to each Party's activities with respect to the Commercialization of such Party's Product as relevant and necessary to the commercialization of the Combination Therapy pursuant to this Agreement (at all times to the extent such information exchange is permitted by Applicable Law); and

(vii) perform such other functions as are assigned to the JCC in this Agreement, or otherwise delegated to the JCC by the JEC (within the authority of the JEC) or agreed by the Parties in writing.

3.4 Committee Meetings. Each of the JDC, JSC and the JCC shall meet at least once [***], either in person or by audio or video conference with the venue of the in-person meetings alternating between locations designated by each Party. For clarity, each Party may call special meetings of the JDC, JSC or the JCC with at least [***] Business Days' prior written notice, or a shorter time-period in exigent circumstances, to resolve particular matters requested by such Party that are within the purview of the JDC, JSC or the JCC, respectively. Employees of each Party other than JDC, JSC or JCC representatives may attend meetings of such Committee as non-voting participants. The JEC will meet upon reasonable request of either Party and as reasonably necessary to coordinate public disclosures with respect to the Combination Therapy as described in Section 3.1, either in person or by audio or video conference. Each Party shall bear all travel, lodging, meal and other expenses associated with the attendance of its representatives and other personnel at Committee meetings. The Parties shall alternate in preparing and circulating minutes of each Committee meeting within [***] days after such meeting for the Parties' review and approval. Such minutes shall provide a description, in reasonable detail, of the discussions at the meeting and shall document all actions and determinations approved by the applicable Committee at such meeting. The Parties shall promptly discuss any comments on such minutes and finalize the minutes no later than the date of the next Committee meeting.

3.5 Decision-Making.

(a) Committee Decision Making. All decisions of each Committee shall be made by unanimous vote, with Affirmed's representatives collectively having one (1) vote and Artiva's representatives collectively having one (1) vote. No action taken at any meeting of a Committee shall be effective unless a representative of each Party is participating in such meeting. Representatives of each Party on each Committee shall use reasonable efforts to resolve any dispute within the authority of such Committee in good faith, and the Parties shall first attempt to resolve any such dispute in accordance with this Section 3.5, *provided that*:

(i) [***].

(ii) [***].

(b) [*]** (each, a "*Unanimous Matter*"), which may only be decided by written agreement of both Parties:

(i) expand or add any obligations of Artiva, including any costs incurred by Artiva, beyond what Artiva has otherwise agreed in writing;

(ii) amend or change the Development Plan (or the activities under the Development Plan) in a manner that would reasonably be likely to materially change the commercial opportunity of the Artiva Product, where "materially change", for purposes of this Section 3.5(b)(ii), means [***];

- (iii) amend or change the Development Plan to include additional Indications or remove existing Indications, or to change the Development Budget;
- (iv) decide any aspect of the Confirmatory Combination Therapy Trial, including the Confirmatory Combination Therapy Trial Budget;
- (v) decide any aspect of any Protocol, Regulatory Materials or strategy therefor, or make any other decision, in each case to the extent that it relates to the Artiva Product (including as part of the Combination Therapy), including [***];
- (vi) approving statements within Promotional Materials solely to the extent they are relating to the Artiva Product (e.g., relating to its efficacy, safety or use) as a monotherapy or as part of the Combination Therapy (and not the Affirmed Product);
- (vii) [***];
- (viii) [***]; or
- (ix) determining or modifying the In-Scope Adjusted Revenue Tracking Methodology, Demand Projections or Clinical Demand Plan, or modifying the Royalty Payments.

The Parties acknowledge and agree that any decision of an Unanimous Matter relating to a Clinical Trial shall be subject to and reflect any requirements of a Regulatory Authority, and that no Party may object to the implementation of a Regulatory Authority's requirements even if these contradict the commercial assumptions and arrangements between the Parties under this Agreement, including the commercial opportunity of the Artiva Product as set out in Section 3.5(b)(ii). For clarity, if the Parties are not able to mutually resolve any disputes or agree on any Unanimous Matter in accordance with the procedures in this Section 3.5(a), either of the Parties may submit such Unanimous Matter for final resolution by arbitration pursuant to Article 17.

(c) Scope of Authority. The Committees shall have only such rights, powers and authority as are expressly delegated to them under this Agreement. Notwithstanding any other provision of this Agreement, neither any Committee, [***], shall have the right to: (i) modify or amend this Agreement; (ii) waive compliance with this Agreement; (iii) determine any issue in a manner that would conflict with the express terms and conditions of this Agreement; (iv) resolve any dispute between the Parties regarding interpretation of this Agreement; (v) make a decision that is expressly stated to require the mutual written agreement or mutual written consent of the Parties or an amendment to this Agreement; or (vi) require either Party to violate any Applicable Law; for the avoidance of doubt, any reference to "this Agreement" in (i) to (v) shall not be read to include a reference to the Development Plan. Notwithstanding the establishment and existence of the Committees, each Party shall retain the rights, powers and discretion granted to it hereunder, and the JEC or any other Committee shall not be delegated or vested with rights, powers or discretion unless such delegation or vesting is expressly provided herein.

3.6 Alliance Managers. Within [***] days after the Effective Date, each Party shall appoint (and notify the other party of the identity of) a representative of such Party to act as the primary point of contact for the Parties regarding the Development and Promotion of the Combination Therapy under this Agreement (each, an "**Alliance Manager**"). The Alliance Managers shall be responsible for creating and maintaining collaborative, efficient, and responsive communications within and between Affirmed and Artiva. A Party may replace its Alliance Manager upon written notice to the other Party. Each Alliance Manager may attend any Committee meetings held under this Article 3 as a non-voting member and shall bring matters to the attention of the relevant Committee if the Alliance Manager reasonably believes that such matter warrants such attention.

4. LICENSE GRANTS; CLINICAL DATA; EXCLUSIVITY

4.1 License Grant.

(a) Grant by Artiva. Subject to the terms of this Agreement, Artiva hereby grants to Affirmed:

(i) an exclusive, non-transferable (except as set forth in Section 18.2), royalty-free license, with no right to sublicense except in accordance with Section 4.1(c), under the Artiva Background Technology, Artiva Product Inventions, Artiva Product Patents and Artiva's interest in Joint Technology, in each case to the extent reasonably necessary or useful for the Development of the Combination Therapy in the Field in the Territory, solely to use the Artiva Product to Develop the Combination Therapy in the Field in the Territory to the extent of activities or responsibilities allocated to Affirmed in accordance with the Development Plan or this Agreement. For clarity, the foregoing license does not include any right to Manufacture or Commercialize the Artiva Product or to Develop the Artiva Product outside the Combination Therapy; and

(ii) a non-exclusive, non-transferable (except as set forth in Section 18.2), royalty-free license, with no right to sublicense except in accordance with Section 4.1(c), under the Artiva Background Technology, Artiva Product Inventions, Artiva Product Patents and Artiva's interest in Joint Technology to the extent reasonably necessary or useful for the Promotion of the Combination Therapy in the Field in the Territory solely to Promote the Combination Therapy in the Field in the Territory.

(b) Grant by Affirmed. Subject to the terms of this Agreement, Affirmed hereby grants to Artiva a non-exclusive, non-transferable (except as set forth in Section 18.2), royalty-free license, with no right to sublicense except in accordance with Section 4.1(c), under the Affirmed Background Technology, Affirmed Inventions, Affirmed Patents and Affirmed's interest in Joint Technology, in each case to the extent reasonably necessary or useful for the Development of the Combination Therapy in the Field in the Territory, solely to use the Affirmed Product to Develop the Combination Therapy in the Field in the Territory to the extent of activities or responsibilities allocated to Artiva in accordance with the Development Plan or this Agreement. For clarity, the foregoing license does not include any right to Manufacture or Commercialize the Affirmed Product or to Develop the Affirmed Product outside the Combination Therapy.

(c) Sublicense. Neither Party shall have the right to grant sublicenses under the licenses granted to it under Section 4.1(a) or Section 4.1(b), as applicable, except [***]. Any other sublicenses shall be subject to the other Party's express prior written consent in its sole discretion. Each Party shall remain liable to the other Party for the acts and omissions of its sublicensees.

(d) No Implied Licenses. For clarity, nothing in this Agreement provides either Party with any rights, title or interest or any license to the other Party's intellectual property except as expressly set forth in this Agreement. Each Party agrees that it shall not, and shall not permit any of its Affiliates, licensees or sublicensees to, practice any Patent or Know-How licensed to it by the other Party outside the scope of the licenses expressly granted to it under this Agreement.

4.2 Ownership and Use of Artiva Product Clinical Data, Affirmed Product Clinical Data and Combination Therapy Clinical Data.

(a) Ownership. The Parties shall jointly own all Combination Therapy Clinical Data in equal and undivided shares, except for any Affirmed Product Clinical Data comprised therein which shall be solely owned by Affirmed, and any Artiva Product Clinical Data comprised therein which shall be solely owned by Artiva. Affirmed shall maintain all Combination Therapy Clinical Data in its database and shall grant access to Combination Therapy Clinical Data to Artiva in accordance with Section 5.10. In each case in accordance with and subject to the limitations set forth in this Section 4.2(b) [***].

(b) Use and disclosure of Unpublished Combination Therapy Clinical Data. Prior to publication of the Combination Therapy Clinical Data in accordance with Section 12.2, either Party may use and disclose the Combination Therapy Clinical Data solely as follows:

(i) Artiva shall be free to use and disclose the Artiva Product Clinical Data for any purpose at its discretion;

(ii) Affirmed shall be free to use and disclose the Affirmed Product Clinical Data for any purpose at its discretion;

(iii) Affirmed may use and disclose any Combination Therapy Clinical Data to the extent disclosure is required to clinical sites (or Affiliate or Third Party subcontractors in accordance with Section 5.12) in connection with the Combination Therapy Trials;

(iv) [***];

(v) [***];

(vi) [***];

(vii) [***];

(viii) each Party may disclose the Combination Therapy Clinical Data to the extent such disclosure is required to comply with Applicable Laws (e.g., disclosures to the SEC or other similar governmental authorities) or is in connection with Regulatory Materials or communications with Regulatory Authorities in the Territory regarding the Combination Therapy or Combination Therapy Trials, in each case in accordance with Section 11.3;

(ix) each Party may disclose the Combination Therapy Clinical Data to the extent such disclosure is required to Regulatory Authorities in compliance with a Party's policies and procedures relating to pharmacovigilance and adverse event reporting for its Product;

(x) [***];

(xi) each Party may disclose the Combination Therapy Clinical Data to the extent such disclosure is expressly permitted under Section 11.3.

Each Party shall implement appropriate technical and organizational measures to ensure compliance with the limitations of use and disclosure of certain Combination Therapy Clinical Data set out in this Section 4.2(b), [***].

(c) Use After Publication. Following publication of any portion of the Combination Therapy Clinical Data, each Party shall be free to use such portion of the Combination Therapy Clinical Data for any purpose.

4.3 Exclusivity.

(a) Mutual Exclusivity Obligations. During the Term, to the extent permitted under Applicable Law and subject to the terms of this Section 4.3, neither Party nor any of its Affiliates, either internally or through intentionally enabling a Third Party, shall clinically develop or commercialize any product or therapy comprising its Product, [***], in the Field in the Territory for any Indication which is included in the then-applicable Development Plan and for which the Parties have agreed to file an IND, except for the Combination Therapy in accordance with this Agreement.

(b) Affirmed's Exclusivity Obligations. During the Term, to the extent permitted under Applicable Law and subject to the terms of this Section 4.3, neither Affirmed nor any of its Affiliates, either internally or through intentionally enabling a Third Party, shall clinically develop or commercialize any product or therapy comprising the Affirmed Product and an NK Cell, [***];

(c) Artiva's Exclusivity Obligations. During the Term, to the extent permitted under Applicable Law and subject to the terms of this Section 4.3, neither Artiva nor any of its Affiliates, either internally or through intentionally enabling a Third Party, shall clinically develop or commercialize any product that directly and specifically binds to CD30 (not including pathway effects) without any known off-target binding that is pre-clinically or clinically relevant in the Field in the Territory [***];

(d) **Exceptions.** The exclusivity obligations according to Section 4.3(a) to 4.3(c) shall not apply:

(i) [***];

(ii) [***];

(iii) [***]

(iv) in case of either Party, to support of academic not-for-profit research (excluding, for clarity, clinical research or development), or compassionate use programs, either by providing funding or providing any product, and granting the necessary rights under Patents and Know-How Controlled by the relevant Party or any of its Affiliates in connection therewith.

(e) **Exceptions Following Change of Control.** [***]

5. DEVELOPMENT

5.1 Development Plan.

(a) **Development Plan.** Subject to the terms and conditions of this Agreement, the Parties shall use Commercially Reasonable Efforts to Develop the Combination Therapy in accordance with a written development plan (as may be amended, the “**Development Plan**”). The Development Plan shall set forth (without limitation): (i) the objectives and activities of the Parties with respect to Development of the Combination Therapy; (ii) target Indications for the Combination Therapy [***], Combination Therapy Trials planned for such Indications, key Regulatory Authority meetings, and filing of applications for Regulatory Approval, in each case, including the Parties’ good-faith estimate of relevant timelines therefor; (iii) strategy and regulatory pathway for obtaining Regulatory Approval for the Combination Therapy, including the Parties’ respective roles in the development of the registration dossier and Regulatory Materials for the Combination Therapy and (iv) a mutually agreed Development Budget. [***].

(b) **Amendment to the Development Plan.** The draft Development Plan that is mutually agreed upon by the Parties is attached hereto as Exhibit 5.1(b), and the JSC shall review and approve an initial Development Plan based on such draft at its first meeting after the Effective Date. The JSC shall regularly review the Development Plan and the progress of activities being conducted under the Development Plan. Subject to Section 3.5, the JSC shall update the then-current Development Plan once every Calendar Year, or more or less often as the Parties deem appropriate. If the Parties determine to seek Regulatory Approval for the Combination Therapy in the Initial Territory, and the FDA requires the conduct of a Confirmatory Combination Therapy Trial as a condition for granting accelerated approval under 21 C.F.R. §601 Subpart E for the Combination Therapy in a particular Indication, then the Parties shall update the Development Plan to include the conduct of such Confirmatory Combination Therapy Trial, including the Confirmatory Combination Therapy Trial Budget for the applicable Confirmatory Combination Therapy Trial Activities, to be approved by the JSC. [***] Subject to Section 3.5, the Development Plan as updated or amended shall (i) be in effect upon JSC’s approval of such Development Plan and (ii) supersede the previous Development Plan for the applicable period. In the event of any inconsistency between the Development Plan and this Agreement, the terms of this Agreement shall prevail. [***].

5.2 Performance. Each Party shall use Commercially Reasonable Efforts to perform the Development tasks assigned to it under the Development Plan in accordance with the Development Plan, including the timelines specified therein. Each Party shall conduct its activities under the Development Plan in a good scientific manner and in compliance with all Applicable Laws.

5.3 Allocation of Responsibilities.

(a) **Affirmed’s Responsibilities.** Affirmed shall control and be primarily responsible for the Development of the Combination Therapy in accordance with this Agreement and the Development Plan. Subject to the terms and conditions of this Agreement and the oversight of the JSC, Affirmed shall (i) act as the sponsor of the Combination Therapy Trials as set forth in Section 6.1(a), and (ii) manage and be primarily responsible for the conduct

of the applicable Combination Therapy Trial, including (A) managing the operations of the Combination Therapy Trials in accordance with the applicable Protocol, including overseeing compliance by any subcontractor (including clinical research organizations) engaged by Affirmed for the Combination Therapy Trials; and (B) concluding all necessary agreements with Third Party subcontractors (including clinical research organizations) and clinical trial sites and ensuring that these agreements (1) are consistent with the relevant terms of this Agreement, including confidentiality and intellectual property provisions consistent with those set forth in this Agreement, and (2) permit Affirmed to audit trial sites for quality assurance, to inspect and copy all data, documentation and work products relating to the Combination Therapy Trials and to share audit results relating to the Combination Therapy Trials with Artiva. Affirmed shall perform all Combination Therapy Trials in accordance with this Agreement, the Protocol, and all Applicable Laws, including GCP. Without limiting the generality of the foregoing in this Section 5.3(a), Affirmed shall use Commercially Reasonable Efforts to (x) file an IND for the Combination Therapy with the FDA [***]; and (y) dose the first subject in a Phase I Clinical Trial of the Combination Therapy [***]. Affirmed shall ensure that all Regulatory Approvals from any Regulatory Authority or ethics committee with jurisdiction over the Combination Therapy Trials are obtained prior to initiating performance of such Combination Therapy Trials.

(b) Artiva's Responsibilities. Artiva shall carry out those activities assigned to Artiva pursuant to the Development Plan and, unless otherwise specified, in this Agreement at no cost to Affirmed; [***].

(c) Responsibility Allocation Matrix. Without limiting the other terms of Articles 5 through 7, Exhibit 5.3(c) sets forth each Party's responsibilities relating to the Development of the Combination Therapy, which, unless expressly provided under this Agreement, may only be amended upon written agreement of the Parties.

5.4 Development Costs. Affirmed shall be solely responsible for all costs associated with the Development of the Combination Therapy (including, for clarity, all costs associated with all Combination Therapy Trials) in accordance with this Agreement and the Development Plan (including the Development Budget); except that (a) Artiva shall be solely responsible for all costs incurred by Artiva in (i) supplying sufficient quantities of Artiva Products and IL-2 Product pursuant to Article 8, and (ii) performing any activities allocated to Artiva pursuant to Section 5.3(b), and (b) if the FDA requires the conduct of a Confirmatory Combination Therapy Trial as a condition for granting accelerated approval under 21 C.F.R. §601 Subpart E for the Combination Therapy in a particular Indication in the Initial Territory, then each of Affirmed and Artiva shall bear fifty percent (50%) of the FTE Costs and Out-of-Pocket Expenses incurred by the Parties for the performance of the Confirmatory Combination Therapy Trial Activities in accordance with Section 9.1, including all direct costs of manufacturing, supplies, equipment and materials and related expenditures incurred by each Party in supplying sufficient quantities of such Party's Product for such Confirmatory Combination Therapy Trial Activities. Except as expressly set forth in this Section 5.4, Artiva shall not be responsible for any costs associated with the Development of the Combination Therapy. [***].

5.5 Protocol. Each Combination Therapy Trial shall be conducted in accordance with a protocol (each, as may be amended, a "*Protocol*") to be drafted by Affirmed with contributions and input provided by Artiva according to Artiva's responsibilities in the Combination Therapy Trial under this Agreement and the Development Plan, and approved by the JSC, subject to Section 3.5. Any amendments to a Protocol shall be subject to approval of the JSC (subject to Section 3.5) or by written agreement of the Parties.

5.6 Informed Consent Form; Investigator's Brochure. Affirmed shall prepare the patient informed consent form ("*ICF*") for the Combination Therapy Trials conducted under the Development Plan (which shall include any required consent for the sharing and use of Combination Therapy Clinical Data under this Agreement) and provide a draft copy to Artiva for review, comment and any necessary input according to Artiva's responsibilities in the Combination Therapy Trial under this Agreement and the Development Plan. Affirmed shall consider and implement any comments from Artiva regarding the portion of the ICF relating to the use of Artiva Product. Any material changes to the ICF solely relating to the Artiva Product shall be subject to Artiva's review and prior written consent. Any such proposed changes will be sent in writing to Artiva's Alliance Manager. Artiva will provide such consent, or a written explanation for why such consent is being withheld, within [***] Business Days of receiving a copy of Affirmed's requested changes; *provided* that if Artiva fails to provide such written explanation within such [***]-Business Day period, then Artiva shall be deemed to have consented to such change or changes. Affirmed shall provide the JSC with a copy of the final ICF for approval. Artiva shall provide to Affirmed its investigator's brochure (and regularly provide any updates) for the Artiva Product.

5.7 Samples. Samples collected in the course of Combination Therapy Trial activities shall be solely owned by Affirmed (to the extent not owned by the patient and/or the clinical trial site), except that Samples collected in the course of the Confirmatory Combination Therapy Trial shall be jointly owned by the Parties in equal and undivided shares (to the extent not owned by the patient and/or the clinical trial site). Any such Samples shall be collected and used solely in accordance with the applicable Protocol and ICFs. Except as set forth in the Development Plan, neither Party shall be permitted to use such Samples for any purpose without the approval of the JSC. All data and intellectual property arising out of such Samples use shall be considered Combination Therapy Clinical Data or Inventions, as applicable. Following completion of Development Plan Activities, Affirmed shall have the first right to store the Samples for future use; *provided* that if Affirmed determines that it no longer has a use for the Samples and Artiva determines that it does, then the Samples shall, subject to Applicable Laws and the terms of the signed ICFs, be transferred to Artiva and may be used solely thereafter by Artiva. If neither Party has any further use for the Samples, then the remaining Samples shall be destroyed pursuant to the respective Party's standard operating procedures for sample destruction, subject to the terms of and permission(s) granted in the ICFs signed by the subjects contributing such Samples in the Combination Therapy Trials.

5.8 Development Records. Each Party shall maintain complete, current, and accurate records (in the form of technical notebooks or electronic files) of all Development activities conducted by it under the Development Plan and all information resulting from such work (including, for clarity, all Combination Therapy Clinical Data). Each Party shall ensure that such records fully and properly reflect all Development activities performed and results achieved therefrom in sufficient detail and in good scientific manner appropriate for patent and regulatory purposes. To the extent required to meet a request by the FDA or any other Regulatory Authority, each Party shall permit the other Party upon reasonable advance written request to review and copy such records at reasonable times during normal business hours and to obtain access to originals of such records.

5.9 Development Reports and Updates. Each Party shall use Commercially Reasonable Efforts to provide the other Party with any deliverables described in the Development Plan in accordance with the timelines set out therein. At each regularly scheduled JSC meeting, each Party shall provide the JSC with regular reports detailing its Development activities for the Combination Therapy, the results of such activities, and if applicable, an update on its spend for the performance of any Confirmatory Combination Therapy Trial Activities. The Parties shall discuss the status, progress, and results of Development activities under this Agreement at such JSC meetings. Each Party shall respond in a timely fashion to any reasonable requests of the other Party for additional information related to such reports provided to the JSC. In addition to the foregoing reports and meetings with the JSC, each Party shall promptly provide the other Party with any material updates on Development of the Combination Therapy.

5.10 Provision of Combination Therapy Clinical Data; Final Report. In addition to its safety data and SAEs reporting obligations pursuant to Section 6.4 and the JSC reports as required in Section 5.9, Affirmed shall provide Artiva with [***]. Affirmed shall provide Artiva the final version of the final report promptly following its completion.

5.11 Materials Transfer.

(a) Materials. To facilitate the Development of the Combination Therapy, either Party may provide to the other Party certain biological materials or chemical compounds (other than such Party's Product) Controlled by the supplying Party for use by the other Party (such materials or compounds, together with any progeny and derivatives thereof and improvements thereto, collectively, the "**Materials**"). All such Materials shall (i) remain the sole property of the supplying Party, (ii) be used only in the fulfillment of obligations or exercise of rights under this Agreement, subject to any limitations specified in writing by the supplying Party in connection with such provision, (iii) be used solely under the control of the recipient Party, (iv) not be used or delivered to or for the benefit of any Third Party (other than permitted subcontractors under Section 5.12) without the prior written consent of the supplying Party and (v) not be used in research or testing involving human subjects, unless expressly agreed in writing by the Parties.

(b) Use Restrictions. The recipient Party of the Materials shall (i) comply with all Applicable Laws regarding the handling and use of the Materials and (ii) not attempt to reverse engineer, deconstruct or in any way determine the structure or composition of the Materials. Any unused Materials shall be, at the supplying Party's discretion and instruction, either destroyed (with such destruction certified in writing) or returned to the supplying Party upon the expiration or any termination of this Agreement.

(c) Disclaimer. EXCEPT AS EXPRESSLY PROVIDED UNDER THIS AGREEMENT, THE MATERIALS ARE PROVIDED “AS IS”. NO REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, OF ANY KIND, ARE GIVEN BY THE SUPPLYING PARTY WITH RESPECT TO ANY OF THE MATERIALS, INCLUDING THEIR CONDITION, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE.

5.12 Subcontracting.

(a) Permitted Subcontracting. Subject to Section 5.12(b), each Party shall have the right to subcontract any portion of its obligations hereunder or under a Related Agreement to its own Affiliates or to Third Parties without the other Party’s prior written consent, including, for clarity, to contract research organizations or other Third Parties for activities in connection with the Combination Therapy Trial or CMC activities for such Party’s Product (*e.g.*, manufacture, packing and testing), *provided* that before involving a Third Party for activities in connection with the Combination Therapy Trial for the first time, either Party shall provide to the JSC a high-level summary of the name and experience of that Third Party and reasonably take into consideration any concerns the other Party might raise through the JSC with respect to such Third Party. Exhibit 5.12(a) sets out a list of Third Parties that, as of the Effective Date, Affirmed and Artiva intend to engage as subcontractors for any material activities under this Agreement or the Development Plan.

(b) Requirements. Before allowing any Third Party subcontractor to begin performing any activity under this Agreement or a Related Agreement, the subcontracting Party shall enter into a written agreement with such subcontractor that obligates such subcontractor (and its personnel involved in the performance of such activity) to be bound by the terms and conditions of this Agreement (or the Related Agreement) applicable to the activity to be performed by such subcontractor in the same manner as such terms and conditions apply to such Party, including (i) the ownership and assignment of Inventions in accordance with Section 10.1 and (ii) the obligations of confidentiality and non-use no less stringent than those set forth in Article 11. The subcontracting Party shall be responsible for the direction and coordination of the performance of each subcontractor and shall ensure the subcontractor’s compliance with the terms and conditions of this Agreement. Each Party shall remain liable to the other Party for the acts and omissions of its subcontractors. Each Party hereby expressly waives any requirement that the other Party exhaust any right, power or remedy, or proceed directly against such subcontractor, for any obligation or performance hereunder, prior to proceeding directly against the subcontracting Party. Each Party shall use reasonable efforts to obtain and maintain copies of documents relating to the obligations performed by such subcontractors that are held by or under the control of such subcontractors and that are required to be provided to the other Party under this Agreement or the applicable Related Agreement.

5.13 Quality Agreement. Latest within [***], the Parties shall enter into a clinical quality agreement (as may be amended in accordance with its terms, the “*Quality Agreement*”) which shall govern clinical quality issues relating to the conduct of Combination Therapy Trials, including quality issues relating to the Affirmed Product, the Artiva Product and the IL-2 Product.

5.14 No Restrictions on Each Party’s Product.

(a) Provision of Products. This Agreement does not create any obligation on the part of either Party to provide its Product for any activities other than the Development activities for the Combination Therapy as set forth in the Development Plan.

(b) Clinical Trials; No Exclusive Relationship. Subject to Section 4.3, as applicable, nothing in this Agreement shall (i) prohibit either Party from performing Clinical Trials relating to its own Product, either individually or in combination with any other compound or product, in any therapeutic area or (ii) create an exclusive relationship between the Parties with respect to any Product.

6. REGULATORY

6.1 Overview.

(a) Affirmed's Responsibility. Affirmed shall be solely responsible for the following activities in connection with the Combination Therapy Trials:

(i) preparing, obtaining, and maintaining regulatory filings and approvals solely related to the Affirmed Product (including its use as part of the Combination Therapy in the Territory), *provided* that with respect to such regulatory filings and approvals, Affirmed shall use Commercially Reasonable Efforts to ensure that such regulatory filings and approvals are not in conflict with, or otherwise endanger, the Regulatory Materials or the use of the Affirmed Product as part of the Combination Therapy in the Territory;

(ii) acting as the sponsor of record as provided in 21 C.F.R. §312.50 or its equivalents, unless otherwise delegated in accordance with 21 C.F.R. §312.52 or its equivalents;

(iii) preparing and filing Regulatory Materials related to the Combination Therapy and Combination Therapy Trials during clinical development of the Combination Therapy, *provided* that Artiva shall have the right to review and comment on any Regulatory Materials related to the Combination Therapy as set forth in Section 6.2(a); and making all required submissions to Regulatory Authorities in the Territory related thereto on a timely basis;

(iv) listing each Combination Therapy Trial required to be listed on a public database, including clinicaltrials.gov or other public registry in any country in the Territory in which such Combination Therapy Trial is being conducted in accordance with Applicable Laws, and with Artiva's cooperation, in accordance with Affirmed's internal policies on clinical trial registration; and

(v) pursuant to Section 6.4 and the Pharmacovigilance Agreement, owning and being responsible for the maintenance of the global safety database and safety reporting for the Combination Therapy.

(b) Artiva's Responsibility. Artiva shall be solely responsible for preparing, obtaining, and maintaining all regulatory filings and approvals solely related to the Artiva Product (including its use as part of the Combination Therapy in the Territory), [***].

6.2 Regulatory Matters.

(a) Preparing and Filing Regulatory Materials during Clinical Development. During the clinical development of the Combination Therapy in accordance with this Agreement and the Development Plan, Affirmed shall be solely responsible for preparing and filing all Regulatory Materials for the Combination Therapy at its sole cost. During the clinical development, Affirmed shall (i) be the holder of all Regulatory Materials for the Combination Therapy and (ii) have primary operational responsibility for interactions with the applicable Regulatory Authorities in the Territory with respect to the Combination Therapy. Upon Affirmed's request, Artiva shall at its own cost provide reasonable support with respect to preparation of Regulatory Materials for the Combination Therapy, including by providing any data and information pertaining to the Artiva Product necessary for such filings (*provided* that Artiva may redact proprietary CMC, manufacturing process development information or any other information that Artiva reasonably determines to be competitively sensitive; provided further that if required by the applicable Regulatory Authority and upon Affirmed's request, Artiva shall provide unredacted data and information directly to the Regulatory Authorities). Affirmed shall provide Artiva with copies of proposed Regulatory Materials with respect to the Combination Therapy (except to the extent solely relating to the Affirmed Product) reasonably prior to submission to the applicable Regulatory Authority, and Artiva shall have the right to review and comment on such Regulatory Materials. [***]. Affirmed shall promptly notify Artiva of all Regulatory Materials that Affirmed submits for the Combination Therapy and shall promptly provide Artiva with a copy of such Regulatory Materials (except to the extent solely relating to the Affirmed Product) submitted to the relevant Regulatory Authorities.

(b) Interactions with Regulatory Authorities. Affirmed shall be responsible for engaging, interfacing, corresponding or meeting with any Regulatory Authority regarding Combination Therapy in the Territory. Affirmed shall notify Artiva of any scheduled meeting or conference with any Regulatory Authority that relates to the Combination Therapy reasonably in advance of such meeting and shall provide Artiva with any material documentation prepared for such meeting or conference prior to such meeting or conference (except to the extent

solely relating to the Affirmed Product). In addition, Affirmed shall promptly notify Artiva of any Regulatory Authority meetings or inspections, or any other events potentially impacting regulatory status of the Combination Therapy Trial or the Artiva Product promptly after Affirmed becomes aware of such. Artiva shall have the right (but not the obligation) to have a reasonable number of its personnel attend and participate in any such meetings, conferences and inspections, to the extent permitted by Applicable Laws and to the extent they do not solely relate to the Affirmed Product. Affirmed shall (i) without undue delay provide Artiva with copies of all correspondence to or from, and minutes of material meetings (including, for clarity, telephone conferences) with, any Regulatory Authority relating to Development of the Combination Therapy, (ii) allow Artiva to review and provide comments on any correspondence to Regulatory Authority prior to submission, and (iii) consider Artiva's comments to such correspondence in good faith.

(c) Preparing and Filing Regulatory Materials for Regulatory Approval and Commercialization. Each Party shall use Commercially Reasonable Efforts to file for, obtain and maintain during the term of this Agreement, at its own cost, all Regulatory Approvals for its Product as required to Commercialize its Product as part of the Combination Therapy in the Territory. To the extent required or useful, Affirmed will coordinate the Parties' separate filings for Regulatory Approvals under this Section 6.2(c).

6.3 Right of Reference.

(a) Each Party hereby grants to the other Party a "right of reference" (as defined in 21 C.F.R. §314.3(b)), or similar "right of reference" as defined in applicable regulations in the relevant jurisdiction, with respect to any regulatory filings and approvals Controlled by such Party or its Affiliates in the Territory that solely relates to its Product (including, for clarity, CMC information and the drug master file for its Product) and data contained therein solely to the extent necessary for the other Party to (i) obtain Regulatory Approval for, and conduct, the Combination Therapy Trials and (ii) perform its obligations and exercise its rights with respect to the Combination Therapy as expressly permitted under this Agreement, and for no other purpose.

(b) Affirmed hereby grants to Artiva a "right of reference" (as defined in 21 C.F.R. §314.3(b)), or similar "right of reference" as defined in applicable regulations in the relevant jurisdiction, with respect to any Regulatory Materials for the Combination Therapy in the Territory and the Combination Therapy Clinical Data contained therein solely (i) to the extent necessary for Artiva to apply for, obtain and maintain Regulatory Approvals for the Artiva Product either as a monotherapy or in combination with, or as part of a combination therapy with, agents or products other than the Affirmed Product (but in no case in combination with an Innate Cell Engager Technology other than the Affirmed Product), and (ii) for inclusion in the safety database for the Artiva Product.

(c) Each Party shall provide to the other Party a cross-reference letter or similar communication to the applicable Regulatory Authority to effectuate such right of reference set forth in Section 6.3(a) or Section 6.3(b). If, in any regulatory jurisdiction, it is not possible for a Party to provide such right of reference to the other Party pursuant to Section 6.3(a) or Section 6.3(b), such Party shall take commercially reasonable steps, subject to the terms and conditions of any applicable confidentiality obligations, to provide in lieu of such right of reference the right to use such regulatory filings, approvals and data contained therein (including, for clarity, Regulatory Materials and Combination Therapy Clinical Data contained therein) to the other Party solely for the purposes set forth in Section 6.3(a) or Section 6.3(b), as applicable. [***]. Other than as set forth in this Section 6.3 and Section 4.2, no other right of reference (or right of use, as applicable) is granted by a Party to the other Party.

6.4 Pharmacovigilance Agreement. The Parties will execute a Pharmacovigilance Agreement latest within [***] for the exchange of relevant safety data within appropriate timeframes and in appropriate format to enable the Parties to fulfill local and international regulatory reporting obligations with respect to the use of the Products and the Combination Therapy and to facilitate appropriate safety reviews. The Pharmacovigilance Agreement shall set forth the responsibilities of each Party with respect to safety data reporting, and shall include mutually acceptable guidelines and procedures for the receipt, investigation, recordation, communication, and exchange (as between the Parties) of adverse event reports and any other information concerning the safety of the Products and the Combination Therapy and shall ensure that adverse events associated with such Products and Combination Therapy and other safety information is exchanged according to a schedule that will permit each Party to comply with Applicable Laws and regulatory requirements. Without limiting the generality of the foregoing, Affirmed shall own, and shall be solely responsible for maintaining, the global safety database for the Combination Therapy, and shall be responsible for the safety reporting for the Combination Therapy to the applicable Regulatory Authority in the Territory. In the event of a conflict between the Pharmacovigilance Agreement and this Agreement, the Pharmacovigilance Agreement shall control with respect to its subject matter.

7. PROMOTION AND COMMERCIALIZATION

7.1 Overview. Subject to this Article 7 with respect to the Combination Therapy in the Territory, each Party shall have the right, at such Party's sole discretion and cost, to Commercialize such Party's Product worldwide, itself or with or through its Affiliates or any Third Parties. Affirmed and its Affiliates shall have the sole right to Promote the Combination Therapy in the approved Indications in the Territory, provided that the foregoing shall not limit Artiva's right to reference the Promotional Materials for the Combination Therapy in connection with the Commercialization of the Artiva Product or participate in trade shows or conducting similar activities relating to the Combination Therapy, in each case in accordance with Applicable Law and provided that Artiva shall in each case only use Promotional Material for the Combination Therapy which has been approved by Affirmed and, to the extent required, by the JCC pursuant to Section 3.3(b)(iii). For the avoidance of doubt, each Party shall be solely responsible for maintaining all Regulatory Approvals for the Combination Therapy in the Territory at its sole cost in accordance with Section 6.2(c).

7.2 Combination Therapy Promotion Plan.

(a) Combination Therapy Promotion Plan. Within [***] days after Affirmed's completion of a Pivotal/Registrational Trial of the Combination Therapy, or [***] after Affirmed's submission of its first application for Regulatory Approval for the Affirmed Product for the Combination Therapy in the Territory, Affirmed (or its Affiliate) shall submit to the JCC for review a written plan that sets forth a high-level Promotion strategy (which may include Affiliates of the Parties) with respect to the Combination Therapy (as may be amended, the "**Combination Therapy Promotion Plan**"). [***].

(b) Amendment to the Combination Therapy Promotion Plan. The JCC shall regularly review and discuss the Combination Therapy Promotion Plan and subject to Section 3.5, the JCC may, as necessary, review and update the then-current Combination Therapy Promotion Plan. In the event of any inconsistency between the Combination Therapy Promotion Plan and this Agreement, the terms of this Agreement shall prevail.

7.3 Promotion of the Combination Therapy.

(a) Launch Preparation of Products; Pricing. Each Party shall be solely responsible for preparation of its Product for launch, including in relation to the Combination Therapy. As between the Parties, Affirmed shall be solely responsible for determining the price of the Affirmed Product, the ranges for any price increases or decreases, the annual price ranges for discounting or rebate, and price negotiations and other interactions with Third Party payors or purchasers of the Affirmed Product in the Territory. As between the Parties, Artiva shall be solely responsible for determining the price of the Artiva Product, the ranges for any price increases or decreases, the annual price ranges for discounting or rebate, and price negotiations and other interactions with Third Party payors or purchasers of the Artiva Product in the Territory.

(b) Filling Orders; Booking of Sales.

(i) As between the Parties, each Party shall be solely responsible for filling orders for its Product. Each Party shall book all sales of its Product by or on behalf of such Party, its Affiliates or licensees in accordance with the Accounting Standards. Each Party shall independently maintain an internal system, in accordance with the Accounting Standards and the In-Scope Adjusted Revenue Tracking Methodology, to separately track In-Scope Artiva Sales in the case of Artiva, and In-Scope Affirmed Sales in the case of Affirmed.

(ii) As between Affirmed and Artiva, Affirmed (or its Affiliate or licensee, as applicable) shall keep one hundred percent (100%) of proceeds generated from Affirmed's Commercialization of the Affirmed Product and Artiva (or its Affiliate or licensee, as applicable) shall keep one hundred percent (100%) of proceeds generated from Artiva's Commercialization of the Artiva Product, in each case subject to the payment obligation with respect to In-Scope Artiva Adjusted Revenue and In-Scope Affirmed Adjusted Revenue under Section 9.2.

(c) Promotional Activities.

(i) Affimed (or its Affiliate), at its sole discretion, shall be responsible for promotional activities related to the launch and ongoing Commercialization of the Affimed Product, including Promotional Materials for the Affimed Product, that do not involve the Promotion of the Combination Therapy in the Territory. Artiva, at its sole discretion, shall be responsible for promotional activities related to the launch and ongoing Commercialization as specifically related to the Artiva Product, including Promotional Materials for the Artiva Product, that do not involve the Promotion of the Combination Therapy in the Territory.

(ii) Affimed (or its Affiliate) shall be responsible for promotional activities related to the launch and ongoing Promotion of the Combination Therapy in accordance with Section 7.3(c). Subject to Section 7.3(c)(iv), Affimed (or its Affiliate) shall be responsible for creating Promotional Materials for Promotion of the Combination Therapy for review and, if required according to Section 3.3(b)(iii), approval by the JCC. Prior to approval of the Promotional Materials for the Combination Therapy by the JCC, if required according to Section 3.3(b)(iii) (including the resolution of any dispute thereof in accordance with Section 3.5), Affimed (or its Affiliate) shall Promote the applicable Combination Therapy in the Territory using only the approved product labels and inserts as related to the Combination Therapy approved by the applicable Regulatory Authority. Affimed (or its Affiliate) shall be responsible for ensuring that such Promotional Materials for the Combination Therapy comply with Applicable Laws and the applicable Regulatory Approvals for the Combination Therapy. Either Party may submit updates to Promotional Materials for the Combination Therapy for review and, if required according to Section 3.3(b)(iii), approval by the JCC if (A) such update is based on relevant new scientific, medical or clinical data, relevant new regulatory or legal developments, or changes to the label or inserts approved by the applicable Regulatory Authority for the applicable Combination Therapy, and (B) in the absence of such update, the use of the Promotional Materials would not comply with Applicable Laws in the Territory, and neither Party's representative(s) on the JCC shall unreasonably withhold approval, if required according to Section 3.3(b)(iii), to adopt such updates.

(iii) [***].

(iv) Unless otherwise approved by the JCC, in the performance of Promotion of the Combination Therapy pursuant to this Agreement, neither Party shall use the trademarks, logos, Promotional Materials, trade dress, copyrights, corporate logos, corporate names, visual identity and branding elements of the other Party (or the other Party's other products) without the prior written consent of such other Party.

7.4 Progress Updates for Promotion of Combination Therapy. Through the JCC, Affimed shall provide Artiva with a summary of Affimed's Promotion of the Combination Therapy in the Field in the Territory since the last meeting of the JCC.

8. MANUFACTURE AND SUPPLY

8.1 Overview.

(a) **Clinical Demand Plan and Demand Projections.** As part of the Development Plan, the Parties shall agree on the initial projections of requirements of the Affimed Product, the Artiva Product and the IL-2 Product for the conduct of the Combination Therapy Trials ("**Clinical Demand Plan**"), to be updated from time to time, as required, through the JSC. [***]. The Demand Projections shall be updated on a rolling quarterly basis through the JCC.

(b) **Affimed's Responsibility.** Affimed shall use Commercially Reasonable Efforts to supply (including all Manufacturing, acceptance and release testing) sufficient quantities of the Affimed Product in connection with the Development of the Combination Therapy as set forth in the Development Plan and Clinical Demand Plan and Commercialization of the Affimed Product for use in the Combination Therapy based on the Demand Projections, at Affimed's sole cost. Affimed shall ensure that the Affimed Product is Manufactured in accordance with Applicable Laws and the Quality Agreement and shall be of equivalent quality to the Affimed Product used by Affimed for its own development and commercialization of the Affimed Product in the Territory.

(c) Artiva's Responsibility. Artiva shall use Commercially Reasonable Efforts to supply (including all Manufacturing, acceptance and release testing) sufficient quantities of (i) the Artiva Product and IL-2 Product for the conduct of Combination Therapy Trials as set forth in the Development Plan and Clinical Demand Plan, and (ii) the Artiva Product in connection with Commercialization of the Artiva Product for use in the Combination Therapy based on the Demand Projections, in each case of clauses (i) and (ii), at Artiva's sole cost. Artiva shall ensure that the Artiva Product is Manufactured in accordance with Applicable Laws and the Quality Agreement and shall be of equivalent quality to the Artiva Product used by Artiva for its own development and commercialization of the Artiva Product in the Territory.

8.2 Approvals. Each Party is responsible for obtaining all approvals and permits (including facility licenses) that are required to Manufacture its Product in accordance with Applicable Law at its sole cost.

8.3 Shortage; Allocation. [***].

8.4 Manufacturing Records. Each Party shall create and maintain complete and accurate records in all material respects pertaining to its Manufacture of its Product supplied hereunder in accordance with Applicable Laws.

8.5 Quality. Each Party shall implement and perform operating procedures and controls for sampling, stability and other testing of its Product, and for validation, documentation and release of its Product and such other quality assurance and quality control procedures in accordance with Applicable Laws.

9. FINANCIAL PROVISIONS

9.1 Development Costs. If the Parties perform Confirmatory Combination Therapy Trial Activities in accordance with Section 5.4, within [***] after the end of each Calendar Quarter, each Party shall provide to the other Party a written report of its actual FTE Costs and Out-of-Pocket Expenses incurred with respect to the performance of such Confirmatory Combination Therapy Trial Activities to be shared by the Parties in accordance with Section 5.4 for such Calendar Quarter. If requested by the other Party, the reporting Party will promptly provide invoices or other supporting documentation in sufficient detail to permit the other Party to confirm the accuracy of the reported actual FTE Costs and Out-of-Pocket Expenses pursuant to this Section 9.1. The Parties shall agree in writing on the calculation of any payment to be paid by Artiva to Affirmed or by Affirmed to Artiva so that each Party will bear fifty percent (50%) of the FTE Costs and Out-of-Pocket Expenses incurred by the Parties for the conduct of such Confirmatory Combination Therapy Trial Activities in accordance with Section 5.4. The Party that is owed a payment in accordance with the foregoing shall invoice the other Party for the amount of such payment and the other Party shall pay such invoiced amount within [***] after delivery of such invoice; *provided that*, in the event of any dispute regarding any such payment owed by a Party under this Section 9.1, the undisputed portion of such payment shall be paid in accordance with the foregoing timeline by the applicable Party, and the remaining, disputed portion shall be paid after the Parties resolve such dispute in good faith.

9.2 Agreement Payments.

(a) Tracking Methodology. Within [***] after the latter of Affirmed's and Artiva's submission of their respective first application for Regulatory Approval for the Combination Therapy in the Territory, the Parties shall mutually agree in writing on a methodology for tracking In-Scope Adjusted Revenue (the "*In-Scope Adjusted Revenue Tracking Methodology*"). [***]. The JCC may, as necessary, review and update the In-Scope Adjusted Revenue Tracking Methodology; provided that, for avoidance of doubt, any changes will require mutual agreement by the Parties. If the Parties agree to use the same data source for the tracking of both Products, the Parties shall equally share those costs.

(b) Reports. Commencing upon the Calendar Quarter in which the First Commercial Sale of any In-Scope Artiva Sale occurs and thereafter during the Agreement Payments Term, Artiva shall, within [***], unless extended by mutual agreement, after the end of such Calendar Quarter, provide Affirmed with a report stating the In-Scope Artiva Adjusted Revenue during the applicable Calendar Quarter, calculated in accordance with Section 1.83 (expressed in local currency and converted to Dollars, if applicable). Commencing upon the Calendar Quarter in which First Commercial Sale of any In-Scope Affirmed Sale occurs and thereafter during the Agreement Payments Term, Affirmed shall, within [***] days after the end of such Calendar Quarter, unless extended by mutual agreement, provide Artiva with a report stating the In-Scope Affirmed Adjusted Revenue during the applicable Calendar Quarter calculated in accordance with Section 1.81 (expressed in local currency and converted to Dollars, if applicable). The format and content of each report shall be in the form outlined in the In-Scope Adjusted Revenue Tracking Methodology in accordance with Section 9.2(a).

(c) Agreement Payments. The Parties agree to Agreement Payments that achieve, after each Agreement Payment, an as adjusted proportion of Affirmed In-Scope Adjusted Revenue to total In-Scope Adjusted Revenue (Affirmed In-Scope Adjusted Revenue plus Artiva In-Scope Adjusted Revenue) equal to sixty-seven percent (67%) (the “**Agreed Value**”), unless otherwise adjusted pursuant to Section 16. Commencing upon the First Commercial Sale of any In-Scope Adjusted Revenue in the Field in the Territory and continuing during the Agreement Payments Term on a quarterly basis, Artiva shall pay to Affirmed (or its designated Affiliate), or Affirmed (or its designated Affiliate) shall pay to Artiva, a payment as follows (the “**Agreement Payments**”):

Agreement Payment = [(In-Scope Affirmed Adjusted Revenue) + (In-Scope Artiva Adjusted Revenue)] x Agreed Value] - In-Scope Affirmed Adjusted Revenue

If the calculated Agreement Payment is a positive amount, Artiva shall pay the Agreement Payment for such Calendar Quarter to Affirmed (or its designated Affiliate). If the calculated Agreement Payment is a negative amount, Affirmed (or its designated Affiliate) shall pay the Agreement Payment for such Calendar Quarter to Artiva.

The Parties shall agree in writing on the Agreement Payment for a Calendar Quarter within [***] days following the receipt of both the In-Scope Artiva Adjusted Revenue report and In-Scope Affirmed Adjusted Revenue report for such Calendar Quarter, and the Party owing the Agreement Payment shall make such payment within [***] after such agreement. [***].

9.3 Payments. All payments by a Party to the other Party under this Agreement shall be made in US Dollars via electronic funds transfer in the requisite amount to such bank account as such other Party may from time to time designate by notice in writing to the paying Party, *provided* that any change in bank account shall become effective no earlier than the [***] following the notice to the paying Party. For the purpose of calculating any sums due under, or otherwise reimbursable pursuant to, this Agreement (including the calculation of any In-Scope Artiva Adjusted Revenue or In-Scope Affirmed Adjusted Revenue) expressed in currencies other than Dollars, the Party responsible for such calculations shall convert any amount expressed in a foreign currency into US Dollar equivalents pursuant to Section 9.6. For clarity, any reference in this Agreement to \$ shall be construed as a reference to US Dollar.

9.4 Taxes.

(a) Withholding Taxes. Except as otherwise provided in this Section 9.4, each Party shall pay all income and other taxes (including interest) imposed on or measured with respect to its own income accruing with respect to payments pursuant to this Agreement. If Applicable Laws require the withholding of taxes from any payments made by either Party under this Agreement, such Party will make such withholding payments and will subtract the amount thereof from the payments made by it under this Agreement. The withholding Party will timely remit any amounts withheld under this provision to the appropriate governmental authority and will submit to the other Party appropriate proof of payment of the withheld taxes as well as the official receipts within a reasonable period of time. If the withholding Party determines that any withholding in respect of taxes is required with respect to any payment made by it to the other Party under this Agreement, such Party shall cooperate with and use best efforts to assist the other Party in order to allow the other Party to eliminate or mitigate any such withholding tax obligations with respect to such payments, including obtaining the benefit of any present or future treaty against double taxation which may apply to such payments. Without limiting the foregoing, the Parties each agree to inform the other as soon as reasonably practicable concerning any anticipated withholding taxes, cooperate in good faith to minimize the overall taxes, levies, imposts, duties and fees of whatever nature imposed in respect of the payments to be made under this Agreement; *provided* that the foregoing efforts shall not obligate either Party to expose itself or its Affiliates to any additional risk or increased external costs hereunder unless the other Party offers to reimburse such external costs.

Prior to any payment to be made pursuant to this Agreement, each Party shall provide the other with such forms or documentation as may be reasonably necessary to eliminate or reduce any applicable withholding taxes, provided, that Affirmed shall satisfy this provision by providing Artiva with (i) an Internal Revenue Service Form W-8BEN-E, claiming eligibility for the benefits of the income tax treaty between the United States and Germany or (ii) causing its Affiliate that is entitled to receive payments pursuant to this Agreement with an Internal Revenue Service Form W-9, or such other Internal Revenue Service form establishing a reduction or elimination of withholding taxes on which Artiva can rely. It is further provided that Artiva shall satisfy this provision by providing Affirmed with an Internal Revenue Service Form W-9. Each Party represents that as of the date of this Agreement, based on present knowledge, it does not intend to withhold tax on payments to the other Party under this Agreement.

(b) Later Imposed Withholding.

(i) In the event that a Party (the “**Paying Party**”) does not withhold taxes from a payment due to the other Party (the “**Recipient Party**”) under this Agreement, and a governmental authority proposes to impose a liability in respect to withholding taxes in connection with such payment against the Paying Party (together with any penalties and interest imposed in connection therewith, a “**Later Imposed Withholding**”) the Paying Party shall promptly notify the Recipient Party of such proposal, forward any information received and shall cooperate with the Recipient Party in evaluating any such claim. If the Recipient Party chooses to contest any such claim, it shall control any such contest at its own expense. The Paying Party shall reasonably cooperate with any such contest, including facilitating the Recipient Party’s control thereof (e.g., by executing powers of attorney) and the Recipient Party shall reimburse the Paying Party for any reasonable out-of-pocket costs incurred in connection with such cooperation.

(ii) Upon either (i) a governmental authority successfully assessing a deficiency for any Later Imposed Withholding under a final determination in respect of such tax which, under applicable law, is not subject to further review, appeal or modification due to through proceedings or otherwise (including as a result of the expiration of a statute of limitations or period for the filing of claims for refunds, amended Tax Returns or appeals from adverse determinations), including a “determination” as defined in Section 1313(a) of the Code or analogous provisions of state, local or non-U.S. law, or (ii) the Recipient Party electing to not contest (or continue to contest) a proposed liability, the Recipient Party will indemnify the Paying Party for such Later Imposed Withholding.

(iii) At the Paying Party’s election, (i) the Paying Party may offset the amount of such Later Imposed Withholding indemnifiable pursuant to Section 9.4(b)(ii) from future payments due to the Recipient Party under this Agreement, or (ii) the Recipient Party shall pay the amount of such Later Imposed Withholding indemnifiable pursuant to Section 9.4(b)(ii) to the Paying Party promptly upon request. Promptly following the Paying Party withholding any Later Imposed Withholding or the Recipient Party remitting any Later Imposed Withholding to the Paying Party, the Paying Party will (A) pay to the relevant governmental authority the amount of such Later Imposed Withholding; and (B) provide evidence of such payment to the Recipient Party on a reasonable and timely basis. In the event that any Later Imposed Withholding is subsequently reduced, the Parties shall ensure that the benefit of such reduction is paid over to the Recipient Party.

(c) **VAT.** All payments or other consideration payable under this Agreement are exclusive of VAT. If and to the extent VAT (i) is properly chargeable in accordance with applicable laws in respect of, or as a result of, any supplies of goods or services, or sales rendered under this Agreement and (ii) is to be paid to the competent tax authorities by the Party making such supply of goods or services, or sales, the receiving Party shall pay, in addition to the payment (or the provision of other consideration for such supply or sales), an amount equal to such VAT at the applicable rate to the providing Party upon receipt of a valid VAT invoice (or, if later, on the due date for payment (or the provision of such other consideration) for such supply or sale). The Parties shall issue invoices for all amounts payable or other consideration provided under this Agreement consistent with applicable VAT laws and regulations and irrespective of whether the sums or other consideration may be netted for settlement purposes. Each Party shall provide such information as is reasonably requested by the other Party to enable the recovery, as permitted by applicable laws, of any VAT charged in respect of any supplies of goods or services, or sales, rendered under this Agreement, such recovery being for the benefit of the Party bearing the economic cost of such VAT under this Section 9.4(c). Notwithstanding the foregoing, if as a result of any assignment or sublicense by the Party providing the supply or service, any change in such providing Party’s tax residency, any change in the entity that provides the supply or service, or any failure on the part of such providing Party to comply with applicable law (other than any failure

resulting from reliance on any certification or other information provided by the Party receiving the supply or service with respect to the amount of applicable VAT) with respect to VAT (including filing or record retention requirements), VAT is imposed that would not otherwise have been imposed (“**Incremental VAT**”), then, if and to the extent such Incremental VAT cannot be offset or recovered by means of an input VAT deduction by the Party receiving the supply or service, the Party providing the supply or service shall be solely responsible for the amount of such Incremental VAT and shall indemnify the Party receiving the supply or service so that such receiving Party is left in the same after-Tax position it would have been in had there been no such imposition of Incremental VAT.

(d) Where under the terms of this Agreement, one Party is liable to indemnify or reimburse another person in respect of any costs, charges or expenses, the payment shall only include an amount equal to any VAT thereon not recoverable by the other Party (or the principal or representative member of any VAT group of which it forms part), subject to that Party (or representative member) taking all reasonable steps to recover such amount of VAT as may be practicable.

(e) **Foreign Derived Intangible Income.** Affirmed shall use Commercially Reasonable Efforts to provide, and to cause its Affiliates, subcontractors, sublicensees, customers, and applicable Third Parties to provide, any information and documentation reasonably requested by Artiva and reasonably available to Affirmed to obtain the benefits of Section 250 of the Internal Revenue Code of 1986, as amended and the applicable Treasury Regulations, with Artiva reimbursing Affirmed for all out-of-pocket costs.

9.5 Interest. If any payment due to either Party under this Agreement is not paid when due, then such paying Party shall pay interest thereon. All interest shall accrue and be calculated on a daily basis (both before and after any judgment) at a rate per annum equal to [***] above the then current “prime rate” in effect published in *The Wall Street Journal (U.S., Eastern Edition)*, but in no event in excess of the maximum rate permissible under applicable law, for the period from the due date for payment until the date of actual payment.

9.6 Currency; Exchange Rate. All payments under this Agreement shall be payable in US Dollars. When conversion of payments from any foreign currency is required in connection with the payment of any payment obligations under this Agreement, such conversion shall be made by each Party according to the conversion mechanism it generally applies under its Accounting Standards.

9.7 Financial Records; Audit.

(a) **Record-Keeping Obligations.** Each Party shall, and shall cause its Affiliates and (using reasonable efforts) its licensees to, keep and maintain complete and accurate books and records pertaining to: (i) all costs incurred by such Party in connection with the performance of Confirmatory Combination Therapy Trial Activities in sufficient detail to permit the other Party to confirm the basis and accuracy of the costs incurred by such Party under this Agreement; (ii) inputs necessary to calculate the Agreement Payment in accordance with Section 9.2(c); (iii) with respect to Artiva only, all In-Scope Artiva Adjusted Revenue, and (iv) with respect to Affirmed only, all In-Scope Affirmed Adjusted Revenue. Such books and records shall be retained by such Party (and its Affiliates and licensees) until the later of: (A) [***] after the end of the period to which such books and records pertain; or (B) the expiration of the applicable tax statute of limitations (including any extensions thereof), or for such longer period as may be required by Applicable Law.

(b) **Audit.** At the request of the other Party, each Party shall, and shall cause its Affiliates and (using reasonable efforts) its (sub-)licensees to, permit an independent public accounting firm of internationally recognized standing designated by the other Party and reasonably acceptable to the audited Party, at reasonable times during normal business hours and upon reasonable notice, to audit the books and records maintained pursuant to Section 9.7(a) to ensure the accuracy of all reports, invoices and payments made hereunder. [***]. The accounting firm shall disclose to the auditing Party only whether the audited information is correct or incorrect and the specific details concerning any discrepancies. Except as provided below, the cost of any audit conducted pursuant to this Section 9.7(b) shall be borne by the auditing Party, unless the audit reveals a variance of more than [***] from the reported or invoiced amounts, in which case, the audited Party shall bear the full cost of the audit. If such audit concludes that (A) additional amounts were owed by the audited Party, the audited Party shall pay the additional amounts, plus interest calculated in accordance with Section 9.5 or (B) excess payments were made by the audited Party, the auditing Party shall reimburse the audited Party for any such excess payments, in each case of clause (A) or (B), within [***] of the accounting firm’s audit report.

10. INTELLECTUAL PROPERTY

10.1 Ownership.

(a) Background Technology. Subject to the rights granted under Section 4.1, (i) Artiva will retain all rights, title, and interests in and to Artiva Background Technology, (ii) Affimed will retain all rights, title, and interests in and to Affimed Background Technology, and (iii) each Party will retain its joint rights, title and interest in and to all Joint Background Patents and Joint Background Know-How.

(b) Program Inventions

(i) Artiva Product Inventions. Artiva shall solely own all rights, title, and interest in and to any and all Inventions (and intellectual property rights therein) that solely constitute an improvement or enhancement to Artiva Background Technology, including any Inventions (and intellectual property rights therein) solely relating to [***] ("**Artiva Product Inventions**"). Affimed hereby irrevocably assigns to Artiva all its rights, title and interest in and to all Artiva Product Inventions. Artiva Product Inventions shall be the Confidential Information of Artiva.

(ii) Affimed Inventions. Affimed shall solely own all rights, title, and interest in and to any and all Inventions (and intellectual property rights therein) that solely constitutes an improvement or enhancement to any Affimed Background Technology, including any Inventions (and intellectual property rights therein) solely relating to [***] ("**Affimed Inventions**"). Artiva hereby irrevocably assigns to Affimed all its rights, title and interest in and to all Affimed Inventions. Affimed Inventions shall be the Confidential Information of Affimed.

(iii) Joint Collaboration Inventions. The Parties shall jointly own all rights, title, and interest in and to any and all Inventions that are not Affimed Inventions or Artiva Product Inventions, including all intellectual property rights therein ("**Joint Collaboration Inventions**"), and all Patents claiming any Joint Collaboration Invention ("**Joint Collaboration Patents**"). Each Party hereby assigns to the other Party such interest in such Joint Collaboration Inventions and Joint Collaboration Patents as necessary to vest joint ownership in the Parties. Except as expressly provided under this Agreement, unless otherwise agreed by the Parties on a commercially reasonable royalty or other compensation for the practice of such Joint Collaboration Inventions or any Joint Collaboration Patents, neither Party shall have any rights to license, assign or exploit its interests in any Joint Collaboration Invention or Joint Collaboration Patent anywhere in the world. [***].

(c) Non-Program Inventions. The Parties acknowledge and agree that each of the Parties Controls and may gain Control over certain Know-How and other intellectual property rights with respect to NK Cell technology and/or Innate Cell Engager Technology through activities outside the scope of the collaboration hereunder and independent of the Parties' performance hereunder or the Combination Therapy Trials or activities under the Development Plan, which are in each case not provided by the Controlling Party nor used for the conduct of the Combination Therapy Trial or activities under the Development Plan (the "**Non-Program Inventions**"). The Party that Controls such Non-Program Inventions shall retain all rights, title, and interests in and to such Non-Program Inventions, and such Non-Program Inventions shall not be subject to Section 10.1(b).

10.2 Prosecution and Maintenance.

(a) Product Patents. Artiva shall have the sole right, at its sole expense, to Prosecute and Maintain, defend and enforce any and all Patents that Cover an Artiva Product Invention (and not an Affimed Invention or Joint Collaboration Invention) ("**Artiva Product Patents**"). Affimed shall have the sole right, at its sole expense, to Prosecute and Maintain, defend and enforce any and all Patents that Cover an Affimed Invention (and not an Artiva Product Invention or Joint Collaboration Invention) ("**Affimed Patents**"). [***].

(b) Joint Patents.

(i) Promptly following the Effective Date, patent representatives of each of the Parties shall discuss the patenting strategy for any Joint Collaboration Inventions which may arise. In particular, the Parties shall discuss whether to file a Joint Patent and the strategy for the Prosecution and Maintenance of such Joint Patent. For the avoidance of doubt, (i) any Patent that Covers both (A) an Artiva Product Invention and (B) any other Invention, and (ii) any Patent that Covers both (1) an Affirmed Invention and (2) any other Invention, in each case of ((i) and (ii)), shall be a Joint Patent. [***].

(ii) [***].

10.3 Enforcement.

(a) **Notice.** Each Party shall notify the other Party in writing of any threatened or actual infringement, misuse, or misappropriation by any Third Party of any Joint Technology (including any Joint Patent), or any declaratory judgment action relating thereto (“*Infringement*”), promptly after becoming aware of any such Infringement.

(b) **Coordination; Recovery.** The Parties will promptly meet, discuss and agree, in light of the circumstances of such Infringement, which Party should take the lead or whether the Parties should jointly lead in initiating legal action to enforce any Joint Patents against infringement, and to protect any Know-How within Joint Technology from misappropriation, or to defend any declaratory judgment action relating thereto. If the Parties mutually agree to initiate such legal proceeding, each Party shall be responsible for [***] of the reasonable, verifiable, and out-of-pocket costs incurred in connection with such action. [***].

(c) **Allocation of Recoveries.** Any damages recovered from a Third Party in an Infringement action shall be first allocated to reimburse the Parties for their costs and expenses in making such recovery (which amounts shall be allocated *pro rata* if insufficient to cover the totality of such expenses), [***].

10.4 Infringement of Third Party Rights.

(a) **Notice.** If the Development or Promotion of the Combination Therapy or the conduct of any Combination Therapy Trial becomes the subject of a claim of infringement of a Patent, copyright, or other proprietary right by a Third Party, the Party first having notice of the claim shall promptly notify the other Party and, without regard to which Party is charged with said infringement and the venue of such claim, the Parties shall promptly confer to discuss the claim and the appropriate course of action and may, if appropriate, agree on and enter into a “common interest agreement” wherein the Parties agree to their shared, mutual interest in the outcome of such potential dispute.

(b) **Coordination; Recovery.** If an infringement claim described in Section 10.4(a) is brought against one or both Parties, except as provided in the last sentence of this Section 10.4(b), the Parties shall defend such claim jointly, unless they agree otherwise in writing. [***]. If the charged Party does not commence actions to defend such claim within thirty (30) days after being so charged, then the other Party shall have the right, but not the obligation, to defend such claim. The non-defending Party shall reasonably cooperate with the Party conducting the defense of the claim and shall have the right to participate with separate counsel at its own expense, and the defending Party shall consider in good faith the non-defending Party’s comments and suggestions on strategy for defending such action. The Party defending the claim shall bear the costs of the defense of any such claim and shall have sole rights to any recovery. No Party shall enter into any settlement concerning activities under this Agreement or any Combination Therapy that affects the other Party’s rights under this Agreement or imposes any obligations on the other Party, including any admissions of wrongdoing on behalf of the other Party, without such other Party’s prior written consent, such consent not to be unreasonably withheld or delayed. Notwithstanding the foregoing, if a claim of infringement described in Section 10.4(a) is attributable solely to one Party’s Development, Manufacture or Commercialization of its Product, such Party shall have the sole right and obligation, to defend and settle the disposition of such claim, at its sole expense, in a manner not to materially adversely impact the other Party’s rights under this Agreement.

10.5 Use of Confidential Information. Except as expressly provided in Section 10.2, each Party agrees to make no patent application based on the other Party's sole Confidential Information, to incorporate any Confidential Information solely owned by the other Party into a patent application, and to give no assistance to any Third Party for such application, without the other Party's prior written authorization.

10.6 Inventor Compensation. Each Party shall be responsible for payment of any consideration which it is required to pay to its employees or independent consultants or subcontractors as compensation for the assignment of rights to any Artiva Product Inventions, Affirmed Inventions, or Joint Collaboration Inventions, as applicable, according to the legal provisions applicable in the relevant country and/or a contractual obligation.

10.7 Joint Research Agreement. The Parties acknowledge and agree that this Agreement will be deemed to be a joint research agreement as referenced in 35 United States Code Section 102(c), and that Inventions arising under this Agreement are intended to have the benefit of the rights and protections conferred hereunder.

11. CONFIDENTIALITY

11.1 Definition and Ownership of Confidential Information. As used herein, "**Confidential Information**" of a Party means any and all nonpublic information (including Know-How) of such Party that is disclosed in connection with this Agreement or any Related Agreement (whether orally, electronically, visually or in writing) by or on behalf of such Party to the other Party or its designee. Except as otherwise expressly provided in the Agreement, Inventions and other intellectual property shall be the Confidential Information of the Party(ies) that own such Inventions and other intellectual property. [***]. The terms and conditions of this Agreement shall be Confidential Information of both Parties.

11.2 Disclosure and Use of Confidential Information.

(a) Confidentiality and Non-Use Obligations. Except to the extent expressly authorized by this Agreement, each Party (for purposes of this Article 11, the "**Receiving Party**") in possession of Confidential Information of the other Party (for purposes of this Article 11, the "**Disclosing Party**") shall: (i) hold in confidence and not disclose the Disclosing Party's Confidential Information to any Third Party without prior written consent of the Disclosing Party, except to the extent expressly authorized by this Agreement or otherwise agreed in writing by the Parties, and (ii) only use (or permit the use of) the Disclosing Party's Confidential Information as expressly permitted by this Agreement or any Related Agreement or for the performance of the Receiving Party's obligations or the exercise of the Receiving Party's rights under this Agreement or any Related Agreement; provided that, notwithstanding the foregoing ((i) and (ii)), with respect to any Confidential Information that constitutes Combination Therapy Clinical Data, the applicable Receiving Party shall have the right to use such Combination Therapy Clinical Data as provided in Section 4.2.

(b) Exceptions. The Receiving Party's obligations set forth in Section 11.2(a) shall not apply to that portion of the Disclosing Party's Confidential Information to the extent that the Receiving Party establishes by contemporaneous written evidence that such Confidential Information:

(i) was known to the Receiving Party, other than under an obligation of confidentiality, at the time of disclosure by the Disclosing Party;

(ii) was generally available to the public or otherwise part of the public domain, at the time of disclosure by the Disclosing Party;

(iii) becomes generally available to the public or otherwise part of the public domain after the disclosure by the Disclosing Party, other than through any act or omission of the Receiving Party in breach of this Agreement;

(iv) is subsequently disclosed to the Receiving Party by a Third Party who has a legal right to make such disclosure and who did not obtain such information directly or indirectly from the Disclosing Party; or

(v) is subsequently and independently developed by employees, subcontractors or sublicensees of the Receiving Party or its Affiliates without use of or reference to the Disclosing Party's Confidential Information, other than through any act or omission of the Receiving Party in breach of this Agreement.

11.3 Authorized Disclosures.

(a) Applicable Law. The Receiving Party may disclose the Disclosing Party's Confidential Information if such disclosure is required by Applicable Law (including to comply with the order of a court of competent jurisdiction or in connection with any filing with a securities exchange), but only to the extent such disclosure is reasonably necessary for such compliance; *provided, however*, except as otherwise required or necessitated by such Applicable Law, the Receiving Party shall provide prompt written notice of such disclosure requirement to the Disclosing Party and provide reasonable assistance to enable the Disclosing Party to seek a protective order or otherwise limit or prevent such disclosure. In any event, the Receiving Party shall only disclose that portion of the Confidential Information that is legally required to be disclosed. Any Confidential Information that is disclosed in order to comply with Applicable Law pursuant to this Section 11.3(a) will remain otherwise subject to the confidentiality and non-use provisions of this Article 11 with respect to such Receiving Party disclosing such Confidential Information.

(b) Regulatory Authorities. The Receiving Party may disclose the Disclosing Party's Confidential Information to Regulatory Authorities to the extent such disclosure is required to comply with Applicable Laws or is in connection with such Party's regulatory filings, submissions and communications with Regulatory Authorities regarding such Party's Product.

(c) Combination Therapy Trials. The Receiving Party may disclose the Disclosing Party's Confidential Information to Third Party subcontractors engaged by the Receiving Party in accordance with Section 5.12(b) to the extent such disclosure is required to conduct the Combination Therapy Trials or to otherwise fulfill its obligations under this Agreement; *provided, however*, that any such subcontractors must be contractually bound in writing by obligations substantially similar to those set forth in this Article 11 and comply with other requirements set forth in Section 5.12(b).

(d) Prosecution and Maintenance of Patents. The Receiving Party may disclose the Disclosing Party's Confidential Information to the extent such disclosure is required for the Receiving Party's Prosecution and Maintenance of Affirmed Patents or Joint Patents (in the case the Receiving Party is Affirmed), or Artiva Product Patents (in the case the Receiving Party is Artiva), in each case, as contemplated by this Agreement and in accordance with Section 10.2.

(e) Other Authorized Disclosures. The Receiving Party may disclose the Disclosing Party's Confidential Information, on a confidential basis and to the extent reasonably necessary, to its Affiliates, employees, board members, accountants, attorneys, auditors and other professional, scientific and medical advisors for the sole purpose of enabling such disclosees to provide advice to such Party in connection with the research, development or commercialization of such Party's Product (and except to the extent such disclosee is or could reasonably be expected to be in a conflict of interest in respect of such Confidential Information, or such disclosure would be against applicable insider trading rules). [***].

(f) Terms of this Agreement. The Parties acknowledge that either or both Parties may be obligated to file under Applicable Laws a copy of this Agreement with the SEC or other similar governmental authorities. Each Party shall be entitled to make such a required filing, *provided* that it requests confidential treatment of the commercial terms and sensitive technical terms hereof and thereof to the extent such confidential treatment is reasonably available to such Party and permitted by such governmental authority. In the event of any such filing, the filing Party will consult with the other Party on the provisions of this Agreement to be redacted in any filing made with the SEC or as otherwise required by Applicable Laws; *provided* that the filing Party shall have the right to make any such filing as it reasonably determines necessary under Applicable Laws.

11.4 Continuing Obligation. Article 11 shall survive the expiration or termination of this Agreement for a period of [***].

11.5 Personal Information. All Confidential Information containing Personal Information shall be handled in accordance with all Applicable Laws relating to data protection and privacy.

11.6 Return or Destruction of Confidential Information. Upon expiration or any early termination of this Agreement, or upon the Disclosing Party's earlier written request, the Receiving Party shall either return to the Disclosing Party or destroy (at the Disclosing Party's option): (a) all Confidential Information (including all copies, records and other embodiments thereof, in any medium) in its possession (with the exception of one (1) copy of such Confidential Information, which may be retained by the legal department of the Receiving Party in its secure archives to confirm compliance with the non-use and non-disclosure obligations under this Agreement); and (b) any Confidential Information of the Disclosing Party contained in its laboratory notebooks or databases; *provided* that (with respect to both clauses (a) and (b)) the Receiving Party may retain and continue to use such solely-owned Confidential Information of the other Party, to the extent necessary to exercise any surviving rights, licenses or obligations under this Agreement; *provided, further*, that (with respect to both clauses (a) and (b)) such Confidential Information of the Disclosing Party existing on any backup, back-end, or archiving system, or in electronic files of the Receiving Party that are not reasonably accessible, and which cannot be reasonably deleted from such systems or files, may be retained by the Receiving Party.

12. PRESS RELEASES AND PUBLICATIONS

12.1 Press Release; Public Disclosure. The Parties shall jointly agree to the content and timing of all external communications with respect to this Agreement, including an initial press release to be jointly issued by the Parties in the form attached hereto as Exhibit 12.1, subsequent press releases, media Q&As, and the content and wording of any listing of a Combination Therapy Trial on a public database or public registry (such as clinicaltrials.gov). Both Parties may make subsequent press release or public disclosure of prior disclosures agreed by the Parties; *provided* that such subsequent disclosure does not (a) include any new data or information, conclusions, or other non-public information about the other Party, or (b) present the previously agreed content in a form or manner that materially alters the conclusion or subject matter therein.

12.2 Publication of Combination Therapy Clinical Data.

(a) Registration; Initial Publication of Combination Therapy Clinical Data. To the extent required by Applicable Law, Affirmed will register the Combination Therapy Trials with the clinical trials registry located at clinicaltrials.gov. Any publication of the Combination Therapy Clinical Data will be in accordance with the terms of this Agreement and the Protocol. The initial publication of the Combination Therapy Clinical Data will be a joint publication of both Parties, in a substance and form to be agreed by and through the JSC and in accordance with the strategy approved by the JEC; *provided* that the JSC representatives may not unreasonably withhold, condition or delay their consent to such substance or form.

(b) Publication. Subject to Section 12.2(a), each Party shall use Commercially Reasonable Efforts to publish scientific paper, letter or any other manuscript in a scientific journal or present any abstract, poster, talk or any other presentation, in either case related to the Combination Therapy Clinical Data (each, a "**Publication**") in accordance with accepted scientific practice and the procedures set forth in this Section 12.2(b). The Party proposing to publish or present a Publication shall deliver to the other Party a copy of the proposed Publication: (i) for abstracts, posters or slide presentations, at least [***] prior to submission (in the case of abstracts) or first public presentation (in the case of posters and slide presentations); and (ii) at least [***] in advance of first submission and each subsequent submission in the case of scientific papers, letters or any other manuscripts; or (iii) within such other timeframe as the Parties may agree. The reviewing Party shall determine whether any of its Confidential Information [***] that may be disclosed in such Publication should be modified or deleted, whether to file a Patent application on any Affirmed Invention (solely with respect to Affirmed) or Artiva Product Invention (solely with respect to Artiva) or Joint Collaboration Invention disclosed therein. The presentation or submission of such Publication shall be delayed for an additional [***] if a reviewing Party reasonably requests such extension to allow time for the preparation and filing of relevant Patent applications. If a reviewing Party reasonably requests modifications to the Publication to prevent the disclosure of such Party's Confidential Information, the publishing Party shall remove such information prior to the presentation or submission of such Publication. The Parties shall work in good faith and in a timely manner to resolve any disagreement as to the content, timing, and/or venue or forum for such Publication. Authorship of any Publication shall be determined based on the accepted standards used in peer-reviewed academic journals at the time of the proposed publication or presentation.

12.3 Acknowledgements. Each Party agrees to identify and acknowledge the other Party's support in any press release and any Publication.

13. REPRESENTATIONS, WARRANTIES AND COVENANTS; DISCLAIMERS.

13.1 Mutual Representations and Warranties. Each Party represents and warrants to the other Party that as of the Effective Date:

(a) it is a company or corporation duly organized, validly existing, and in good standing under the laws of the jurisdiction in which it is incorporated, and has full corporate power and authority and the legal right to own and operate its property and assets and to carry on its business as it is now being conducted and as contemplated in this Agreement, including the right to grant the licenses granted by it hereunder;

(b) it has the full right and authority to enter into this Agreement and to perform all of its obligations hereunder;

(c) it has taken all necessary corporate action on its part required to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder;

(d) it has taken all other action necessary to authorize such execution, delivery and performance as required by Applicable Law, its certificate of incorporation, by-laws or other organizational documents or any agreement to which it is a party or to which it may be subject;

(e) this Agreement has been duly executed and delivered on behalf of such Party, and constitutes a legal, valid, and binding obligation of such Party that is enforceable against it in accordance with its terms;

(f) it is not a party to any agreement that would prevent it from granting the rights granted to the other Party under this Agreement or performing its obligations under this Agreement;

(g) neither the execution and delivery of this Agreement nor the performance hereof by it requires it to obtain any permits, authorizations or consents from any governmental authority (other than any Regulatory Approvals) or from any other person, firm or corporation, and such execution, delivery and performance will not result in the breach of or give rise to any right of termination, rescission, renegotiation or acceleration under, or trigger any other rights under, any agreement or contract to which it is a party or to which it may be subject that relates to Affirmed Background Technology in the case of Affirmed, or to Artiva Background Technology in the case of Artiva;

(h) [***];

(i) [***]; and

(j) to the best of its knowledge:

(i) [***]; and

(ii) [***].

13.2 Covenants.

(a) **Compliance.** Each Party hereby covenants to the other Party that it shall carry out (i) the Development and Promotion of the Combination Therapy, (ii) Commercialization of its Product and (iii) its other obligations or activities hereunder in accordance with: (A) the terms of this Agreement, the Development Plan, the Combination Therapy Promotion Plan and the Related Agreements and (B) all Applicable Laws and Regulatory

Approvals. Without limiting the foregoing, each Party shall (x) maintain appropriate policies, practices and procedures to ensure its compliance with all applicable Healthcare Laws, and (y) track and report to applicable Regulatory Authorities information relating to pricing and/or transfers of value to healthcare providers, teaching hospitals and other Third Parties with respect to its activities and/or operations regarding the applicable Product Commercialized by or on behalf of such Party.

(b) No Debarment. Neither Party nor any of its Affiliates shall use in any capacity, in connection with the performance of its obligations under this Agreement, any person or entity that has been Debarred. Each Party agrees to inform the other Party in writing promptly if it learns that it or any person or entity that is performing activities in connection with this Agreement is Debarred or is subject to Debarment or, to the notifying Party's knowledge, if Debarment of the notifying Party or any person or entity used in any capacity by such Party or any of its Affiliates in connection with the performance of its other obligations under this Agreement, is threatened.

(c) FCPA. Each Party hereby covenants to the other Party, on behalf of itself and its officers, directors, employees, Affiliates and agents, that, in connection with the matters that are the subject of this Agreement, and the performance of its obligations hereunder, it shall (i) comply with the U.S. Foreign Corrupt Practices Act (to extent applicable), as amended, and any other Applicable Law relating to or concerning public or commercial bribery or corruption and its applicable anti-corruption policies and (ii) not take any action that will cause the other Party or its Affiliates to be in violation of any such laws or policies.

(d) No Conflicts. During the Term, neither Party shall, or shall allow its Affiliates to, enter into any agreement granting a license or other right that is inconsistent with the rights granted to the other Party under this Agreement.

13.3 Disclaimers.

(a) Combination Therapy Trials. Neither Party makes any assurances that the Combination Therapy Trials will lead to any particular result. Each Party acknowledges that the success of the Combination Therapy Trials is not guaranteed. Neither Party accepts any liability for any use that the other Party may make of the Combination Therapy Clinical Data nor for advice or information given in connection therewith.

(b) General. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, NO REPRESENTATIONS OR WARRANTIES WHATSOEVER, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT, OR NON-MISAPPROPRIATION OF THIRD PARTY INTELLECTUAL PROPERTY RIGHTS, IS MADE OR GIVEN BY OR ON BEHALF OF A PARTY. EXCEPT AS EXPRESSLY STATED IN THIS AGREEMENT, ALL REPRESENTATIONS AND WARRANTIES, WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE, ARE HEREBY EXPRESSLY EXCLUDED.

14. INDEMNIFICATION; LIMITATION OF LIABILITY; INSURANCE.

14.1 Indemnification by Affirmed. Affirmed shall defend, indemnify and hold harmless Artiva, its Affiliates, and its and their employees, directors, subcontractors and agents (collectively, the "**Artiva Indemnitees**") from and against any liabilities, damages, settlements, penalties, fines, reasonable costs and expenses (including, reasonable attorneys' fees and other expenses of litigation) (collectively, "**Losses**") resulting from Third Party suits, claims, actions, allegations and demands (each, a "**Third Party Claim**") against an Artiva Indemnitee to the extent that they arise or result from: (a) the negligence or willful misconduct by any Affirmed Indemnitee in connection with this Agreement, (b) a breach by Affirmed of any of its representations, warranties, covenants or other obligations of Affirmed under this Agreement, (c) any Later Imposed Withholding (subject to Section 9.4(b)), (d) any injury to a subject in the Combination Therapy Trial to the extent attributable to the Affirmed Product, (e) any injury to a customer or end-user of Combination Therapy to the extent attributable to the Affirmed Product or (f) the use by Affirmed, its Affiliates, contractors or licensees of Combination Therapy Clinical Data, Affirmed Inventions, or Joint Technology (including Joint Patents); but excluding, in each case (of (a) through (f)), any such Losses to the extent arising or resulting from a cause or event for which Artiva is obligated to indemnify the Affirmed Indemnitees pursuant to Section 14.2.

14.2 Indemnification by Artiva. Artiva shall defend, indemnify and hold harmless Affirmed, its Affiliates, and its and their employees, directors, subcontractors and agents (collectively, the “*Affirmed Indemnitees*”) from and against any Losses resulting from Third Party Claims against an Affirmed Indemnitee to the extent that they arise or result from: (a) the negligence or willful misconduct by any Artiva Indemnitee in connection with this Agreement, (b) a breach by Artiva of any of its representations, warranties, covenants or other obligations of Artiva under this Agreement, (c) any Later Imposed Withholding (subject to Section 9.4(b)) (d) any injury to a subject in the Combination Therapy Trial to the extent attributable to the Artiva Product, (e) any injury to a customer or end-user of Combination Therapy to the extent attributable to the Artiva Product or (f) the use by Artiva, its Affiliates, contractors or licensees of Combination Therapy Clinical Data, Artiva Product Inventions, or Joint Technology (including Joint Patents); but excluding, in each case (of (a) through (f)), any such Losses to the extent arising or resulting from a cause or event for which Affirmed is obligated to indemnify the Artiva Indemnites pursuant to Section 14.1.

14.3 Procedure. Each Party’s indemnification obligations under Section 14.1 and Section 14.2 are conditioned upon the Party seeking indemnification (the “*Indemnitee*”) delivering a written notice to the other Party (the “*Indemnitor*”) of any applicable Third Party Claim subject to indemnification hereunder promptly after the Indemnitee becomes aware of such Third Party Claim. The Indemnitor will have no indemnification obligations hereunder to the extent materially prejudiced by any delay by the Indemnitee in providing such notice. The Indemnitor will have the sole right to defend or settle (subject to the remainder of this Section 14.3) any Third Party Claim (using counsel reasonably satisfactory to the Indemnitee). The Indemnitee will cooperate fully with Indemnitor in connection therewith, at the Indemnitor’s expense. The Indemnitee may participate in (but not control) the defense thereof at its sole cost and expense. The Indemnitor shall keep the Indemnitee advised of the status of the Third Party Claim and the defense thereof and shall reasonably consider recommendations made by the Indemnitee with respect thereto. The Indemnitee shall not agree to any settlement of any Third Party Claim without the prior written consent of the Indemnitee, which shall not be unreasonably withheld, delayed or conditioned. The Indemnitor shall not agree to any settlement of any Third Party Claim or consent to any judgment in respect thereof that does not include a complete and unconditional release of the Indemnitee from all liability with respect thereto or that imposes any liability or obligation on the Indemnitee without the prior written consent of the Indemnitee, which shall not be unreasonably withheld, delayed or conditioned.

14.4 Limitation of Liability. EXCEPT WITH RESPECT TO (a) CLAIMS INDEMNIFIABLE UNDER SECTION 14.1 AND SECTION 14.2, (b) BREACH OF ARTICLE 11 OR (c) INSTANCES OF FRAUD, GROSS NEGLIGENCE OR WILLFUL MISCONDUCT, IN NO EVENT SHALL EITHER PARTY BE LIABLE TO THE OTHER PARTY FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT, OR INCIDENTAL DAMAGES ARISING OUT OF OR RELATED TO THIS AGREEMENT, INCLUDING LOSS OF PROFITS OR ANTICIPATED SALES, HOWEVER CAUSED, ON ANY THEORY OF LIABILITY AND WHETHER OR NOT SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

14.5 Insurance. As long as any Combination Therapy is being clinically tested in human subjects, each Party shall place and maintain public and general liability insurance with a limit of [***]. There will be separate insurance coverage for Clinical Trials on a so-called non-fault basis. Such policy will be placed for the entire duration of any Combination Therapy Trial until its termination. Thereafter there will be an extended reporting period of at least five (5) years, which will allow the study subject to make a claim directly with the respective insurer. The study subject only has to prove a causal relationship between the study and the bodily suffering rather than any kind of negligence of any of the involved parties. Upon start of Commercialization, the Parties agree to extend the liability coverage and place products liability insurance with an appropriate limit or what is legally required. Such insurance does not create a limit of either Party’s liability with respect to its indemnification obligations under this Article 14. Each Party shall provide the other Party with a certificate of insurance evidencing such Party’s compliance with this Section 14.5 upon request. Each Party’s liability policy shall include the other Party as an additional insured. Each Party shall provide the other with a prior written notice at least thirty (30) days prior to the cancellation, non-renewal or material change in such insurance which materially adversely affects the rights of the other Party hereunder. All required insurance policies of each Party must have a minimum “A-” AM Bests rating.

15. TERM AND TERMINATION.

15.1 Term. The term of this Agreement shall commence on the Effective Date and shall continue in full force and effect until the expiration of the last Agreement Payment Term in the Territory, unless terminated earlier by either Party pursuant to this Article 15 or by written agreement of the Parties (“**Term**”).

15.2 Termination for Material Breach. Either Party may terminate this Agreement if the other Party commits a breach of its material obligation under this Agreement, and such material breach is not cured by the breaching Party within [***] after the breaching Party’s receipt of written notice thereof from the non-breaching Party.

15.3 Termination for Insolvency. If, at any time during the Term, (a) a case is commenced by or against either Party under Title 11, United States Code, as amended, or analogous provisions of Applicable Law outside the United States (the “**Bankruptcy Code**”) and, in the event of an involuntary case under the Bankruptcy Code, such case is not dismissed within [***] after the commencement thereof, (b) either Party files for or is subject to the institution of bankruptcy, liquidation or receivership proceedings (other than a case under the Bankruptcy Code), (c) either Party assigns all or a substantial portion of its assets for the benefit of creditors, (d) a receiver or custodian is appointed for either Party’s business, or (e) a substantial portion of either Party’s business is subject to attachment or similar process (each of ((a) through (e)), a “**Bankruptcy Event**”); then, in any case of a Bankruptcy Event, the other Party may terminate this Agreement immediately upon written notice to the extent permitted under Applicable Law. All rights and licenses granted under or pursuant to this Agreement by each Party to the other Party, as applicable, are and shall otherwise be deemed to be, for purposes of Section 365(n) of the Bankruptcy Code, licenses of rights to “intellectual property” as defined under Article 101(35A) of the Bankruptcy Code. The Parties agree that each Party, as a licensee of such intellectual property rights under this Agreement, shall retain and may fully exercise all of its rights and elections under the Bankruptcy Code. The Parties further agree that, in the event of the commencement of a bankruptcy proceeding by or against a Party under the Bankruptcy Code or analogous provisions of Applicable Law outside the United States, the other Party shall be entitled to a complete duplicate of (or complete access to, as appropriate) any intellectual property rights licensed to such Party under this Agreement and all embodiments of such intellectual property rights, which, if not already in such Party’s possession, will be promptly delivered to it (i) upon any such commencement of a bankruptcy proceeding upon such Party’s written request therefor, unless the Party in the bankruptcy proceeding elects to continue to perform all of its obligations under this Agreement or (ii) if not delivered under clause (i), following the rejection of this Agreement in the bankruptcy proceeding, upon written request therefor by the other Party.

15.4 Termination for Failure to Meet Specified Endpoints. If the Clinical Trial involving the Artiva Product [***] fails to (i) meet safety or tolerability endpoints or (ii) pass a futility assessment, [***], Affirmed may terminate this Agreement upon [***] prior written notice to Artiva. [***].

15.5 Effects of Termination.

(a) Termination of Licenses. Upon any termination of this Agreement, the licenses granted by a Party to the other Party under Section 4.1 shall terminate as of the effective date of such termination.

(b) Return or Destruction of Materials, Confidential Information and Artiva Products. Upon any expiration or termination of this Agreement: (i) each Party shall return or destroy the other Party’s Materials in its possession in accordance with Section 5.11(b); (ii) each Party shall return or destroy the other Party’s Confidential Information in accordance with Section 11.6; and (iii) to the extent applicable, Affirmed shall return or destroy any Artiva Product in accordance with Section 11.6.

(c) Wind Down. Upon receipt by either Party of a termination notice of this Agreement, the Parties shall use reasonable efforts to wind down activities under this Agreement in a reasonable manner, including with respect to any ongoing Combination Therapy Clinical Trials. The terminating Party shall submit to the other Party, and the Parties shall discuss and agree, a proposed wind-down, setting forth the tasks reasonably necessary or required in connection with the orderly termination of any ongoing Combination Therapy Clinical Trials and the proper plan for managing the patients enrolled in such trials, including actions reasonably necessary to safely close out such trials, or required by Applicable Laws.

(d) Survival. Any expiration or termination of this Agreement for any reason shall not release either Party of any obligation or liability which, at the time of such expiration or termination, has already accrued to such Party or which is attributable to a period prior to such expiration or termination. Without limiting the generality of the foregoing, the following provisions shall survive any termination or expiration of this Agreement: Article 10, Article 11, Article 12, Article 14, Article 17 and Article 18; and (ii) Section 3.1(b), Section 3.1(c), Section 4.2, Section 5.11, Sections 9.3 to 9.7 and Section 15.5.

16. OPT-OUT

16.1 Opt-Out. Either Party may opt out of the further Development and Promotion of the Combination Therapy with [***]' prior written notice to the other Party at any time during the following periods:

(a)[***]

(b)[***].

16.2 Right to Continue Development or Promotion of the Combination Therapy.

(a) *Artiva's Right to Continue.* In case of an opt-out by Affirmed pursuant to Section 16.1, Artiva shall have the right, at its election in its sole discretion, to continue Development and Promotion of the Combination Therapy in the Field in the Territory at its sole cost. [***].

(b) *Affirmed's Right to Continue.* In case of an opt-out by Artiva pursuant to Section 16.1, Affirmed shall have the right, at its election in its sole discretion, to continue Development and Promotion of the Combination Therapy in the Field in the Territory at its sole cost. [***].

17. DISPUTE RESOLUTION.

17.1 Disputes. Except as otherwise provided under Section 3.5, if the Parties, in consultation with each Party's Alliance Managers, are unable to resolve any a dispute, controversy or claim of any nature whatsoever arising out of or relating to this Agreement, or the breach, termination or invalidity thereof, (each, a "**Dispute**"), either Party may, by written notice to the other, have such Dispute referred to the Executive Officers of each of Artiva and Affirmed for attempted resolution by good faith negotiations within [***] Business Days after such notice is received. In such event, the Parties shall cause their Executive Officers or their designees to meet and be available to attempt to resolve such issue. If the Parties are unable to resolve any Dispute under this Section 17.1, or if the JEC is unable to resolve any Dispute relating to any Unanimous Matter pursuant to Section 3.5, either Party shall have the right to commence arbitration as set forth in Section 17.2. Any dispute concerning the commencement of the arbitration shall be finally settled by the arbitrators.

17.2 Arbitration. All Disputes shall be finally settled under the Rules of Arbitration of the International Chamber of Commerce by three (3) arbitrators appointed in accordance with the said Rules. The seat, or legal place of the arbitration shall be Geneva, Switzerland. The language of the arbitration shall be English. The law applicable to the substance of the Disputes is the law chosen by the Parties in Section 18.1 of this Agreement.

17.3 Confidentiality. Except for purposes of confirming or challenging an award, or court proceedings to obtain interim relief, any and all activities conducted under this Article 17, including any proceedings, submissions and decisions hereunder, will be deemed Confidential Information of each of the Parties, and will be subject to Article 11, to the extent applicable in accordance with Applicable Law.

17.4 Continued Performance. *Provided* that this Agreement has not terminated, the Parties agree to continue performing under this Agreement in accordance with its provisions, pending the final resolution of any Dispute.

18. GENERAL PROVISIONS.

18.1 Governing Law. This Agreement shall be governed by and interpreted in accordance with the laws of the State of New York, without reference to the principles of conflicts of laws. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to the transactions contemplated by this Agreement.

18.2 Assignment. Neither Party may assign or otherwise transfer, in whole or in part, this Agreement without the prior written consent of the other Party, such approval not to be unreasonably withheld or delayed. Notwithstanding the foregoing, either Party may assign this Agreement, in whole or in part, without the other Party's prior written consent, to (a) an Affiliate or (b) to a successor in interest by way of merger, consolidation or sale of all or substantially all of the assets of such Party to which this Agreement relates. This Agreement may only be assigned together with the Related Agreements. Any attempted assignment of this Agreement not in compliance with this Section 18.2 shall be null and void. No assignment shall relieve either Party of the performance of any accrued obligation that such Party may then have under this Agreement. This Agreement shall inure to the benefit of and be binding upon each Party, its successors and permitted assigns.

18.3 Use of Name. Except as expressly provided herein, neither Party shall have any right, express or implied, to use in any manner the name or other designation of the other Party or any other trade name, trademark or logo of the other Party for any purpose in connection with the performance of this Agreement. Notwithstanding the foregoing, consistent with applicable copyright and other laws, each Party may use, refer to, and disseminate reprints of scientific, medical and other published articles and materials from journals, conferences or symposia relating to the Combination Therapy Trials which disclose the name of a Party, *provided* that such use does not constitute an endorsement of any commercial product or service by the other Party.

18.4 Force Majeure. Neither Party shall be liable to the other Party for failure or delay in the performance of any of its obligations under this Agreement for the time and to the extent such failure or delay is caused by earthquake, riot, civil commotion, war, terrorist acts, strike, flood, or governmental acts or restriction, or other cause that is beyond the reasonable control of the affected Party, and occurring without the affected Party's fault or negligence. The Party affected by such force majeure shall provide the other Party with full particulars thereof as soon as it becomes aware of the same (including its best estimate of the likely extent and duration of the interference with its activities), and shall use Commercially Reasonable Efforts to overcome the difficulties created thereby and to resume performance of its obligations as soon as practicable.

18.5 Severability. If any provision of this Agreement is found by a court of competent jurisdiction to be unenforceable, then such provision will be construed, to the extent feasible, so as to render the provision enforceable, and if no feasible interpretation would save such provision, it will be severed from the remainder of this Agreement. The remainder of this Agreement will remain in full force and effect, unless the severed provision is essential and material to the rights or benefits received by either Party. In such event, the Parties will negotiate, in good faith, and substitute a valid and enforceable provision or agreement that most nearly implements the Parties' original intent in entering into this Agreement.

18.6 Waiver. No failure or delay of a Party to insist upon strict performance of any of its rights or powers under this Agreement shall operate as a waiver thereof, nor shall any other single or partial exercise of such right or power preclude any other further exercise of any rights or remedies provided by law. No waiver by a Party of a particular provision, right or remedy shall be effective unless in writing and signed by an authorized representative of such Party.

18.7 Notices. Any notice required or permitted to be given under this Agreement shall be in writing, shall make specific reference to this Agreement and shall be addressed to the appropriate Party at the address specified below or such other address as may be specified by such Party in writing in accordance with this Section 18.7, and shall be deemed to have been given for all purposes (a) when received, if hand-delivered or sent by a reputable overnight delivery service, (b) on the day of sending by facsimile or email (with documented confirmation of receipt), if followed by mailing by first class certified or registered mail, postage prepaid, return receipt requested or sent by a reputable overnight delivery service or (c) five (5) days after mailing, if mailed by first class certified or registered mail, postage prepaid, return receipt requested.

If to Artiva, to:

Artiva Biotherapeutics, Inc.
5505 Morehouse Drive, Suite 100
San Diego, CA 92121, USA Attn: [***]
Email: [***]

If to Affirmed, to:

Affirmed GmbH
Im Neuenheimer Feld 582
69120 Heidelberg, Germany
Attn: [***]
Email: [***]

18.8 Relationship of the Parties. The relationship between the Parties is and shall be that of independent contractors, and does not and shall not constitute a partnership, joint venture, agency or fiduciary relationship. The Parties do not intend this Agreement or the transactions and obligations contemplated herein to constitute a partnership for any US federal or applicable state, local or non-U.S. income tax purposes. Neither Party shall have the authority to make any statements, representations or commitments of any kind, enter into contracts or take any actions, which are binding on the other Party, except with the prior written consent of the other Party to do so. All persons employed by a Party will be the employees of such Party and not of the other Party and all costs and obligations incurred by reason of any such employment shall be for the account and expense of such Party.

18.9 Further Assurance. Each Party shall, and shall use all reasonable endeavors to procure that any necessary Third Party shall, promptly execute and deliver such further documents and do such further acts as may be required for the purpose of giving full effect to this Agreement.

18.10 Injunctive Relief. Each Party hereby acknowledges and agrees that in the event of the other Party's actual or threatened breach of any provision of this Agreement relating to the Materials, Confidential Information and/or intellectual property rights (including, Section 5.11, Article 10 and Article 11), the non-breaching Party would suffer an irreparable injury such that no remedy at law would adequately protect or appropriately compensate the non-breaching Party for such injury. Accordingly, notwithstanding anything to the contrary provided in this Agreement, each Party agrees that the non-breaching Party shall have the right to enforce this Agreement and any of such provisions by injunction, specific performance or other equitable relief, without bond and without prejudice to any other rights and remedies that the non-breaching Party may have for a breach of this Agreement.

18.11 Headings; Interpretation. The captions and headings to this Agreement are for convenience only, and are to be of no force or effect in construing or interpreting any of the provisions of this Agreement. Unless specified to the contrary, references to Articles, Sections or Exhibits mean the particular Articles, Sections or Exhibits to this Agreement and references to this Agreement include all Articles, Sections and Exhibits hereto. Unless context otherwise clearly requires, whenever used in this Agreement: (a) the words "include" or "including" shall be construed as incorporating, also, "but not limited to" or "without limitation;" (b) the word "day" or "year" means a calendar day or year unless otherwise specified; (c) the word "will" shall be construed to have the same meaning and effect as the word "shall" wherever context requires; (d) the words "hereof," "herein," "hereby" or other similar words refer to this Agreement (including any Exhibits); (e) the word "or" shall be construed as the inclusive meaning identified with the phrase "and/or"; (f) words of any gender include the other gender; (g) words using the singular or plural number also include the plural or singular number, respectively; (h) references to any Applicable Law, or article, section or other division thereof, shall be deemed to include the then-current amendments thereto or any replacement Applicable Law thereto; and (i) neither Party or its Affiliates shall be deemed to be acting "on behalf of" or "under authority of" the other Party under this Agreement. Ambiguities and uncertainties in this Agreement, if any, shall not be interpreted against either Party, irrespective of which Party may be deemed to have caused the ambiguity or uncertainty to exist.

18.12 No Third Party Beneficiaries. This Agreement is for the sole benefit of the Parties hereto and their permitted assigns. Nothing herein, express or implied, is intended to or shall confer upon any other person or entity any legal or equitable right, benefit or remedy of any nature whatsoever, under or by reason of this Agreement.

18.13 Entire Agreement; Amendment. This Agreement (together with all Exhibits attached hereto and the Related Agreements, each of which is incorporated herein by this reference) constitutes the final, complete and exclusive agreement of the Parties with respect to the subject matter hereof and supersedes, as of the Effective Date, all prior and contemporaneous agreements, negotiations, arrangements and understandings, both written and oral, between the Parties with respect to the subject matter hereof. For clarity, this Agreement supersedes Section 5.5 and Section 5.7 of the Prior Collaboration Agreement solely as applicable to the Joint Background Patents. No subsequent alteration, amendment, change or addition to this Agreement shall be binding upon the Parties unless in writing and signed by the respective authorized officers of the Parties.

18.14 Counterparts; Electronic Signatures. This Agreement may be executed in two or more counterparts (whether delivered by email via .PDF format, facsimile or otherwise), each of which will be considered one and the same agreement and will become effective when counterparts have been signed by each of the Parties and delivered to the other Party. This Agreement may be executed by signatures on an electronic image (such as .PDF or .JPG format) and electronic signatures, all of which shall have the same force and effect as original signatures.

[Signature page follows]

IN WITNESS WHEREOF, the respective representatives of the Parties have executed this Agreement as of the Effective Date.

AFFIMED GMBH

By: /s/ Adi Hoess
Name: Dr. Adi Hoess
Title: CEO

By: /s/ Wolfgang Fischer
Name: Dr. Wolfgang Fischer
Title: COO

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan
Name: Dr. Fred Aslan
Title: CEO

SIGNATURE PAGE TO COLLABORATION AGREEMENT

Exhibit 1.9

Affimed Product

The tetravalent antibody construct bispecific for CD30 and CD16A that specifically targets CD30 on Hodgkin lymphoma cells and other lymphomas, and recruits and activates CD16A-positive innate immune cells, such as natural killer cells, referred to by Affimed as AFM13.

Exhibit 1.21

Existing Artiva Background Patents

Title	Application No.	Filing Date
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

Exhibit 1.24**Artiva Product**

A non-genetically modified, ex-vivo expanded, umbilical cord blood-derived, allogeneic NK cell therapy referred to by Artiva as AB-101.

Exhibit 1.94

Joint Background Patents

Title	Application No.	Filing Date
***	***	***
***	***	***

Clinical Study Protocol Concept Sheet



CLINICAL STUDY PROTOCOL CONCEPT SHEET

- [***]- [***]

- [***]- [***]

- [***]- [***]

- [***]- [***]

- [***]- [***]

- [***]- [***]

- [***]- [***]

- [***]- [***]

[***]

SPONSOR SIGNATORY

[***]

- [***]
- [***]

- [***]
- [***]

- [***]
- [***]

1. OVERALL RATIONALE FOR THE STUDY

2. [***]

[***]

Table 1: [***]
 [***]

Table 2: [***]
 [***]

3. [***]

[***]

Exhibit 5.3(c)

Responsibility Matrix

[**]

Exhibit 9.2(c)

Baseball Arbitration

If the Parties cannot agree, following escalation to the Executive Officers, on the Agreement Payment pursuant to Section 9.2(c) (such dispute, an “**Expert Matter**”), at the request of either Party by written notice to the other Party, such Expert Matter will be resolved through binding “baseball” arbitration pursuant to this Exhibit 9.2(c) rather than pursuant to the procedures under Section 17.2. If the Expert Matter is not resolved within [***] after referral to the Parties’ Executive Officers, then either Party may send the other Party a written notice requesting to resolve the Expert Matter by using an independent investment banker who shall have no less than ten (10) years of experience in the biotechnology or pharmaceutical industry and relevant expertise and experience with respect to the Expert Matter (“**Expert**”) and shall be selected by mutual agreement of the Parties. If the Parties are unable to agree upon an Expert within [***] after a Party gives the written notice requesting expert resolution, then each Party will have [***] to choose a single independent expert meeting the Expert criteria, and the Parties shall instruct such experts to use best efforts to mutually select, within [***] following the selection of the second of such experts, an independent third expert who meets such criteria to be the Expert. Within [***] after appointment of the Expert, each Party shall submit to the Expert, with a copy to the other Party, one (1) proposal for resolving the applicable Expert Matter, including the proposed Agreement Payment and a reasonably detailed analysis of the model prepared by such Party taking into account the factors described in Section 9.2(c) to determine the proposed Agreement Payment. The Expert will be instructed to select one Party’s proposal no later than [***] following the receipt of both Parties’ proposals and to select the proposal that he or she determines is the most commercially reasonable under the circumstances and best gives effect to the intent of the Parties to effect the Agreed Value under this Agreement. The Expert shall select only one (1) of the proposals submitted by the Parties (without making any changes to such proposal) and shall render such proposal as the Expert’s final decision. Notwithstanding anything to the contrary in this Agreement, the Expert shall not have the authority to render any decision other than selecting one (1) proposal submitted by a Party pursuant to this Exhibit 9.2(c). The Expert’s decision shall be final and binding on the Parties. The out-of-pocket costs of the Expert in making the determination pursuant to this Exhibit 9.2(c) shall be shared equally by the Parties, regardless of the outcome of the determination. All activities undertaken by the Expert will be conducted subject to obligations of confidentiality no less restrictive than those set forth in Article 11. Further, the Parties acknowledge and agree that their respective proposals and all information exchanged in connection with the expert proceedings, and the conduct of such proceedings and any information produced thereunder shall be Confidential Information under this Agreement and subject to the provisions of Article 11.

Press Release



Affimed and Artiva Biotherapeutics Announce Partnership to Advance Combination Therapy of Innate Cell Engager (ICE®) AFM13 and Off-the-Shelf Allogeneic NK Cell Therapy AB-101

- Companies to combine their clinical programs (AFM13, AB-101) to address high unmet need of CD30-positive lymphoma patients
- Affimed's AFM13 in combination with cord blood-derived NK cells demonstrated exceptionally high response rates in relapsed and refractory CD30-positive lymphoma patients
- AB-101 is a clinical-stage, cryopreserved, off-the shelf, non-genetically modified, allogeneic cord blood-derived NK cell manufactured at large scale via Artiva's AlloNKTM platform as a universal ADCC-enhancing cell therapy
- In preclinical studies, the combination of AFM13 and AB-101 demonstrated potent anti-tumor activity
- An investigational new drug (IND) submission to the U.S. Food and Drug Administration (FDA) is planned for the first half of 2023
- Affimed to receive 67% of the combination therapy revenues, and Artiva to receive 33%
- Companies to host conference call/webcast later today at 10:30 am EDT

San Diego and Heidelberg, Germany, November X, 2022 - Affimed N.V. (Nasdaq: AFMD) ("Affimed"), and Artiva Biotherapeutics Inc. ("Artiva"), both immuno-oncology companies focused on developing and commercializing therapies utilizing the innate immune system, today announced a new strategic partnership to jointly develop, manufacture, and commercialize a combination therapy comprised of Affimed's Innate Cell Engager (ICE®) AFM13 and Artiva's cord blood-derived, cryopreserved off-the-shelf allogeneic NK cell product candidate, AB-101.

Affimed submitted a pre-IND meeting request for the AFM13 and AB-101 combination to the FDA requesting feedback on the clinical trial design in relapsed/refractory (r/r) Hodgkin lymphoma (HL) with an exploratory arm evaluating the combination in selected subtypes of r/r CD30-positive peripheral T-cell lymphoma (PTCL) and potential path to registration. FDA responded to this request and guided to providing feedback by Q1 2023.

This clinical agreement follows the parties' existing two-year preclinical collaboration to assess combining elements of the companies' respective platforms in the generation of targeted, off-the-shelf allogeneic NK cell therapies.

"Based on the compelling clinical data we have generated for AFM13 in combination with NK cells, we are committed to finding the fastest path to bringing this potentially life-changing treatment to lymphoma patients," said Dr. Adi Hoess, CEO of Affimed. "The allogeneic NK field is still at a nascent stage, and we selected Artiva because of their commercially-viable production process that can support a multicenter clinical trial and potentially enable a path to registration."

"We are developing AB-101 as a universal ADCC enhancer when combined with monoclonal antibodies and NK cell engagers," said Dr. Fred Aslan, CEO of Artiva. "The data Affimed has generated to date with AFM13 in combination with cord blood-derived NK cells in a patient population with great unmet need is very compelling, and we are excited to partner with Affimed on what could become one of the first approvals for an allogeneic NK cell therapy-based regimen."

AFM13 is currently being investigated in combination with allogeneic cord blood-derived NK cells (CBNK) in an investigator-sponsored study together with The University of Texas MD Anderson Cancer Center. Data from this study published earlier today for presentation at the 64th ASH Annual Meeting and Exposition demonstrated that all 24 patients in the recommended Phase 2 dose cohort responded (overall response rate of 100%) and showed a complete response rate of 70.8%. The combination was well tolerated with few infusion-related reactions and without cytokine release syndrome, immune effector cell-associated neurotoxicity syndrome, or graft versus host disease.

The Affimed-Artiva partnership aims to expedite further development of the combination therapy in CD30-positive lymphoma patients who have exhausted other treatment options. AB-101 has already completed a monotherapy safety cohort in an initial Phase 1 trial and is currently being assessed in combination with the anti-CD20 monoclonal antibody, rituximab, in patients with relapsed or refractory non-Hodgkin lymphoma (NHL). Preclinical results investigating the combination of AFM13 and AB-101 have further demonstrated enhanced anti-tumor activity. The companies plan to file an IND for the program in relapsed/refractory CD30-positive lymphoma patients during the first half of 2023.

Under the terms of the agreement, Affimed and Artiva will pursue the development of the AFM13/AB-101 combination treatment in the United States on a co-exclusive basis. Affimed will lead regulatory activities through the Phase 2 and any confirmatory studies. Affimed will be responsible for funding clinical study costs through Phase 2, while Artiva will be responsible for the costs of supplying AB-101 and IL-2 for such studies. Following a potential accelerated approval, the companies will share confirmatory study costs on a 50/50 basis.

Both companies will retain commercialization and distribution rights and book sales for their respective products. Affimed will be responsible for promotional activities and expenses of the combination therapy. Pursuant to the agreement, revenues from the combination will be shared, with Affimed receiving 67% of the combination therapy revenue and Artiva receiving 33%.

Conference Call/Webcast Details

<To be inserted when available>

About AFM13

AFM13 is a first-in-class innate cell engager (ICE®) that uniquely activates the innate immune system to destroy CD30-positive hematologic tumors. AFM13 induces specific and selective killing of CD30-positive tumor cells, leveraging the power of the innate immune system by engaging and activating natural killer (NK) cells and macrophages. AFM13 is Affimed's most advanced ICE® clinical program and is currently being evaluated as a monotherapy in a registration-directed trial in patients with relapsed/refractory peripheral T-cell lymphoma or transformed mycosis fungoides (REDIRECT). Additional details can be found at www.clinicaltrials.gov (NCT04101331).

About AB-101

AB-101 is a cord blood-derived, allogeneic, cryopreserved, ADCC-enhancing NK cell therapy candidate for use in combination with monoclonal antibodies or innate-cell engagers. Artiva selects cord blood units with the high affinity variant of the receptor CD16 and a KIR-B haplotype for enhanced product activity. Artiva can generate thousands of doses of pure, cryopreserved, infusion-ready NK cells from a single umbilical cord blood unit while retaining the high and consistent expression of CD16 without the need for engineering. Artiva is conducting a Phase 1/2 multicenter clinical trial (ClinicalTrials.gov Identifier: NCT04673617) to assess the safety and clinical activity of AB-101 alone and in combination with the anti-CD20 monoclonal antibody, rituximab, in patients with relapsed or refractory B-cell-non-Hodgkin lymphoma (NHL) who have progressed beyond two or more prior lines of therapy.

About Affimed N.V.

Affimed (Nasdaq: AFMD) is a clinical-stage immuno-oncology company committed to give patients back their innate ability to fight cancer by actualizing the untapped potential of the innate immune system. The company's proprietary ROCK® platform enables a tumor-targeted approach to recognize and kill a range of hematologic and solid tumors, enabling a broad pipeline of wholly-owned and partnered single agent and combination therapy programs. The ROCK® platform predictably generates customized innate cell engager (ICE®) molecules, which use patients' immune cells to destroy tumor cells. This innovative approach enabled Affimed to become the first company with a clinical-stage ICE®. Headquartered in Heidelberg, Germany, with offices in New York, NY, Affimed is led by an experienced team of biotechnology and pharmaceutical leaders united by a bold vision to stop cancer from ever derailing patients' lives. For more about the company's people, pipeline and partners, please visit: www.affimed.com.

About Artiva

Artiva's mission is to deliver highly effective, off-the-shelf, allogeneic NK cell-based therapies utilizing our Manufacturing-First approach, that are safe and accessible to cancer patients. Artiva's pipeline includes AB-101, an ADCC enhancer NK-cell therapy candidate for use in combination with monoclonal antibodies or innate-cell engagers. Artiva is currently advancing a Phase 1/2 clinical trial of AB-101 in combination with rituximab for the treatment of relapsed or refractory B-cell lymphomas. Artiva's pipeline also includes AB-201, an anti-HER2 CAR-NK cell therapy candidate for the treatment of HER2-overexpressing tumors, such as breast, gastric, and bladder cancers, and for which an IND has been allowed by FDA, and a pipeline of CAR-NK candidates targeting both solid and hematopoietic cancers. Artiva has entered into therapeutic NK cell collaborations with Merck Sharp & Dohme Corp. and with Affimed GmbH. Artiva's AlloNK™ platform incorporates cell expansion, activation, and engineering technology developed by Artiva's strategic partner, GC Cell Corporation, a member of the GC family of companies, a leading healthcare company in Korea. Artiva is headquartered in San Diego. For more information, please visit www.artivabio.com.

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Tel. +1.858.344.8091

Exhibit 16.2(a)

Continuation Regime Affirmed Opt-Out

1.1 The Parties shall in good faith agree on a transition plan and timeline to transition into the set-up provided in this Exhibit 16.2(a).

1.2 Subject to the further provisions of this Exhibit 16.2(a), Artiva shall have the right to perform all Development and regulatory activities regarding the Combination Therapy in the Territory that are allocated to Affirmed pursuant to this Agreement and the Development Plan, at Artiva's sole cost, with the relevant provisions of Articles 5 and 6 (other than the sharing of costs for the Confirmatory Therapy Trial Activities) and Section 12.2(a) applied *vice versa* (i.e. [***]). The Parties shall amend the Development Plan (and the responsibility matrix in Exhibit 5.3(c)) [***], whereas the activities and responsibilities allocated to Affirmed in the Development Plan as of the effective date of the opt-out shall be (at maximum) equivalent in scope to the activities allocated to Artiva in the Development Plan (and the responsibility matrix in Exhibit 5.3(c)) before the effective date of the opt-out (i.e., supplying sufficient quantities of Affirmed Products and limited consultancy support).

1.3 The JSC shall be dissolved and any remaining alignment on Development and regulatory activities shall be handled through the Alliance Managers, [***]. Artiva shall have the final decision-making authority except with respect to Unanimous Matters which shall be amended and limited to the following:

1.3.1 expand or add any obligations of Affirmed, including any costs incurred by Affirmed, beyond what Affirmed has otherwise agreed in writing;

1.3.2 amend or change the Development Plan to include additional Indications;

1.3.3 decide any aspect of any Protocol, Regulatory Materials or strategy therefor, or make any other decision, in each case to the extent that it relates to the Affirmed Product (including as part of the Combination Therapy), [***];

1.3.4 approving statements within Promotional Materials to the extent they are relating to the Affirmed Product (e.g., relating to its efficacy, safety or use) as a monotherapy or as part of the Combination Therapy (and not the Artiva Product); and

1.3.5 determining or modifying the In-Scope Adjusted Revenue Tracking Methodology, Demand Projections or Clinical Demand Plan, or modifying the Royalty Payments.

1.4 [***].

1.5 [***]:

1.5.1 [***]

1.5.2 [***].

1.6 [***].

1.7 The exclusivities according to Section 4.3(b) and 4.3(c) shall terminate, but the exclusivities according to Section 4.3(a) (subject to the exceptions according to Section 4.3(d)) shall survive for the remaining term of the Agreement.

1.8 Artiva shall be solely responsible for all costs associated with the Development of the Combination Therapy (including, for clarity, all costs associated with all Combination Therapy Trials, including the Confirmatory Combination Therapy Trial) in accordance with this Agreement and the Development Plan (as amended according to para. 1.2). [***].

1.9 [*].**

1.10 Affirmed shall transfer and assign all Regulatory Materials and Regulatory Approvals for the Combination Therapy in its Control to Artiva. Artiva hereby grants Affirmed a “right of reference” (as defined in 21 C.F.R. §314.3(b)), or similar “right of reference” as defined in applicable regulations in the relevant jurisdiction, with respect to any Regulatory Materials for the Combination Therapy in the Territory and the Combination Therapy Clinical Data contained therein solely (i) to the extent necessary for Affirmed to apply for, obtain and maintain Regulatory Approvals for the Affirmed Product either as a monotherapy or in combination with, or as part of a combination therapy with, agents or products other than the Artiva Product, provided that Affirmed shall not have any right of reference with respect to any Regulatory Materials for the Combination Therapy in the Territory and the Combination Therapy Clinical Data contained therein for any combination with an NK cell other than the Artiva Product, and (ii) for inclusion in the safety database for the Affirmed Product. The “right of reference” granted by Affirmed to Artiva according to Section 6.3(b) shall remain in full force and effect without modification; for the avoidance of doubt, also after the effective date of the opt-out, Artiva shall not have any right of reference with respect any Regulatory Materials for the Combination Therapy in the Territory and the Combination Therapy Clinical Data contained therein for any combination with an Innate Cell Engager Technology other than the Affirmed Product.

1.11 Should Affirmed at any time before market launch of the Affirmed Product in the Territory decide (in its free discretion) to cease any Development or regulatory activities required for such market launch, then Affirmed shall not be in breach of its respective performance obligations (including its Commercially Reasonable Efforts obligations according to Section 5.2 or 6.2(c)), and upon Artiva’s written request, the Parties shall negotiate in good faith the grant of a license by Affirmed to Artiva relating to the Affirmed Product for the Combination Therapy in the Territory.

1.12 The Parties shall amend the Quality Agreement and Pharmacovigilance Agreement to reflect the opt-out and the [***] as set forth in this Exhibit 16.2(a).

1.13 Artiva shall be solely responsible for Promoting the Combination Therapy following the effective date of the opt-out at its own cost and in accordance with the applicable Regulatory Approval for the Combination Therapy. Artiva shall assume all rights and responsibilities of Affirmed in respect of the Promotion of the Combination Therapy and any Promotional Materials according to Article 7; *provided* that the JCC shall be dissolved, Sections 3.3, 7.2 and 7.4 shall terminate and be of no force and effect, and any (remaining) alignment with Affirmed on the Promotion of the Combination Therapy and any Promotional Materials shall be limited to aspects relating to the Affirmed Product (including statements in any Promotional Materials relating to the Affirmed Product (e.g., relating to its efficacy, safety or use) which shall require Affirmed’s approval). Each Party shall continue to be responsible for the Commercialization, filling of orders and booking of sales and revenue for its Product.

1.14 [*].**

1.15 [*].**

1.16 Article 10 shall continue to apply after the effective date of the opt-out, except that [***].

Exhibit 16.2(b)

Continuation Regime Artiva Opt-Out

1.1 The Parties shall in good faith agree on a transition plan and timeline to transition into the set-up provided in this Exhibit 16.2(b).

1.2 The JSC shall be dissolved and any remaining alignment on Development and regulatory activities shall be handled through the Alliance Managers, [***]. Affirmed shall have the final decision-making authority except with respect to Unanimous Matters which shall be amended and limited to the following:

1.2.1 expand or add any obligations of Artiva, including any costs incurred by Artiva, beyond what Artiva has otherwise agreed in writing;

1.2.2 amend or change the Development Plan to include additional Indications;

1.2.3 decide any aspect of any Protocol, Regulatory Materials or strategy therefor, or make any other decision, in each case to the extent that it relates to the Artiva Product (including as part of the Combination Therapy), [***];

1.2.4 approving statements within Promotional Materials solely to the extent they are relating to the Artiva Product (e.g., relating to its efficacy, safety or use) as a monotherapy or as part of the Combination Therapy (and not the Affirmed Product); and

1.2.5 determining or modifying the In-Scope Adjusted Revenue Tracking Methodology, Demand Projections or Clinical Demand Plan, or modifying the Royalty Payments.

1.3 Section 4.2 of the Agreement remains in full force and effect without modification.

1.4 [***].

1.5 [***].

1.6 Should Artiva at any time before market launch of the Artiva Product in the Territory decide (in its free discretion) to cease any Development or regulatory activities required for such market launch, then Artiva shall not be in breach of its respective performance obligations (including its Commercially Reasonable Efforts obligations according to Section 5.2 or 6.2(a)), and upon Affirmed's written request, the Parties shall negotiate in good faith the grant of a license by Artiva to Affirmed relating to the Artiva Product for the Combination Therapy in the Territory.

1.7 [***].

1.8 [***].

1.9 Section 9.2 shall continue to apply, with the Agreed Value pursuant to Section 9.2(c) to be [***].

First Amendment to Collaboration Agreement

This Amendment (the “***Amendment***”) to the Collaboration Agreement (the “***Agreement***”) dated November 1, 2022, by and between **AFFIMED GMBH** (“***Affimed***”) and **ARTIVA BIOTHERAPEUTICS, INC.** (“***Artiva***”), (Affimed and Artiva together the “***Parties***” and each a “***Party***”) is effective November 14, 2022 (the “***Amendment Effective Date***”).

WHEREAS, the Parties have entered into the Agreement.

WHEREAS, the Parties wish to amend the Agreement so that the definition of “Confirmatory Combination Therapy Trial Activities” will be adjusted.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties hereby agree as follows:

1. Section 1.52 of the Agreement is hereby removed entirely and replaced by the following:
1.52 “Confirmatory Combination Therapy Trial Activities” means the activities in a Confirmatory Combination Therapy Trial required by the FDA as a condition for granting accelerated approval of the Combination Therapy in a particular Indication.
2. Capitalized terms used in this Amendment but not defined herein shall have the meaning given thereto in the Agreement.
3. All terms and conditions of the Agreement remain unchanged, except where expressly changed by this Amendment.
4. The provisions of Section 17 (*Dispute Resolution*) and Section 18 (*General Provisions*) of the Agreement shall apply to this Amendment as if set out in full in this Amendment and as if references in those Section to “this Agreement” are references to this Amendment and references to the “Parties” or a “Party” are references to the Parties or a Party of this Amendment.

[Signature page follows]

IN WITNESS WHEREOF, the respective representatives of the Parties have executed this Amendment as of the Amendment Effective Date.

AFFIMED GMBH

By: /s/ Adi Hoess
Name: Dr. Adi Hoess
Title: CEO

By: /s/ Wolfgang Fischer
Name: Dr. Wolfgang Fischer
Title: COO

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan
Name: Dr. Fred Aslan
Title: CEO

Amendment No. 2 to Strategic Collaboration Agreement

This Amendment No. 2 (the “**Amendment**”), effective as of June 30, 2023 (the “**Amendment Date**”), amends certain provisions of the Strategic Collaboration Agreement dated November 1, 2022, amended November 14, 2022 (the “**Agreement**”), between Affimed GmbH, a German corporation having its principal office at Im Neuenheimer Feld 582, 69120 Heidelberg, Germany (“**Affimed**”) and Artiva Biotherapeutics, Inc., a Delaware corporation having its principal office at 5505 Morehouse Drive, Suite 100, San Diego, CA 92121, USA (“**Artiva**”) (Affimed and Artiva each a “**Party**” and together the “**Parties**”).

WHEREAS, Affimed and Artiva find it in their respective interests to amend the provisions of the Agreement.

NOW THEREFORE, pursuant to such provision and for consideration duly given, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree to the following:

1. All capitalized terms not defined herein have the same meaning as those in the Agreement. Except as expressly amended hereby, the Agreement shall continue to remain in full force and effect in accordance with its terms.
2. The Parties agree and acknowledge that Exhibit 5.3(c) of the Agreement shall be replaced with Exhibit 5.3(c) attached hereto.
3. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which shall constitute together the same document. The Parties agree that signatures transmitted by electronic means (e.g. facsimile or a scanned version of the executed agreement in PDF format attached to an e-mail) shall bind the Parties. This Amendment is otherwise governed by the terms and conditions of the Original Agreement, except as amended hereby.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the undersigned parties have had this Amendment executed by its duly authorized representatives.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan

Printed Name: Dr. Fred Aslan

Title: CEO

AFFIMED GMBH

By: /s/ Andreas Harstrick

Printed Name: Dr. Andreas Harstrick

Title: CMO

By: /s/ Wolfgang Fischer

Printed Name: Dr. Wolfgang Fischer

Title: COO



December 6, 2021

Chris Horan

Private & Confidential

Re: Employment Offer Letter

Dear Chris,

On behalf of Artiva Biotherapeutics, Inc. (the “**Company**”), I am pleased to offer you employment under the terms set forth in this offer letter agreement (this “**Agreement**”). These employment terms will be effective as of your start date, which will be on December 31, 2021 (the “**Start Date**”).

1. Employment Position; Duties. You will be employed as the Company’s Chief Technical Operations Officer (“**CTO**”). As CTO, you will have those duties and responsibilities as are customary for this position and as may be directed by the Company. Your position will be remote, and you will work from your home office. During your employment, you will devote your full-time best efforts to the business of the Company.

2. Base Salary; Employee Benefits and Business Expenses.

(a) Base Salary. Your initial base salary will be paid at the annual rate of \$400,000.00, less standard payroll deductions and tax withholdings. Effective upon the closing of the Company’s initial public offering (the “**IPO**”), your base salary will increase to \$450,000.00. Your base salary will be paid on the Company’s normal payroll schedule. As an exempt salaried employee, you will be required to work the Company’s normal business hours, and such additional time as appropriate for your work assignments and position. You will not be eligible for extra payment under the overtime laws.

(b) Employee Benefits. Effective the first day of the month following your Start Date, you will be eligible to participate in the Company’s benefit program. The current benefit program includes medical, dental and vision coverage. You may also elect to participate in the Company’s 401K plan. The Company does not contribute currently to the 401K plan. You will also be eligible to accrue Paid Time Off (PTO) at a rate of 9 hours per pay period, or a total of 216 hours annually. Details of the PTO policy and other benefits are provided in the Company’s Employee Handbook.

(c) Business Expenses. Your legitimate and documented business expenses will be reimbursed by the Company as provided under its business expense reimbursement policies. Your reimbursable business expenses will include reasonable costs of travel from your home office to and from San Diego as required for your role and as agreed upon between yourself and the Company.

3. **Annual Bonus.** In addition to base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of thirty percent (30%) of your base salary in effect during the bonus year. Effective upon the closing of the Company's IPO, your annual target bonus will increase to forty (40%) of your base salary in effect during the bonus year. With respect to the annual incentive compensation program, the Company's executive team will evaluate and recommend specific annual corporate and/or individual performance targets, metrics and/or management-by-objectives ("MBOs"), to be finalized and approved by the Company's Board of Directors (the "**Board**"), as part of its annual compensation review process. Annual bonuses are paid on an annual basis, after the close of the fiscal year and after determination by the Board of (a) the level of achievement of the applicable individual and corporate performance targets, metrics and/or MBOs, and (b) the amount of the annual incentive compensation earned by you (if any). No amount of annual incentive compensation is guaranteed and, in addition to the other conditions for earning such compensation, you must remain an employee of the Company in good standing on the scheduled annual incentive compensation payment date in order to earn or be eligible for any annual incentive compensation. Except as expressly provided in this Agreement or communicated to you in writing by a duly authorized officer of the Company, you will not be entitled to any other incentive compensation, commission, or other bonus programs.

4. **Equity Award:** Upon joining the Company, and subject to approval by the Company's Board of Directors, you will be eligible to receive a stock option grant to purchase 340,000 shares of the Company's common stock (the "**Options**"), pursuant to the Company's 2020 Equity Incentive Plan (the "**Plan**"). The purchase price per share of the Options will be equal to the fair market value of the Company's common stock on the date of grant. Twenty-five percent (25%) of the Options will vest on the one-year anniversary of your Start Date and the remainder will vest in equal monthly installments thereafter over the next thirty-six (36) months, subject to your Continued Service (as defined in the Plan) with the Company through each such vesting date. The terms of the Options will be governed by the Plan and the applicable option award agreement between you and the Company. In addition, provided that you become an employee and commence your Start Date by no later than December 31, 2021, you may be eligible to receive, subject to approval by the Board, additional equity awards under any annual equity award programs the Company may adopt in 2022. Any such annual equity award will not be pro-rated based upon your Start Date.

5. **Signing Bonus:** If you accept and commence employment with the Company, the Company will provide you with a signing bonus of \$100,000 (the "**Signing Bonus**"). The Signing Bonus will be advanced to you prior to it being earned on the second paycheck following your Start Date, and will be subject to the usual payroll deductions and tax withholdings. You will not fully earn the Signing Bonus unless you remain continuously employed with the Company through the 24-month anniversary of your Start Date. The Signing Bonus is subject to the following repayment obligations: (i) if you voluntarily resign, or are terminated by the Company for Cause (as defined in the Plan, or any successor or replacement plan) in each case prior to the 12-month anniversary of your Start Date, then you will be obligated to repay to the Company the full amount of the Signing Bonus; and (ii) if you voluntarily resign, or are terminated by the Company for Cause, in each case anytime between the 13- and 24-month anniversary of your Start Date, then you will be obligated to repay to the Company a pro-rated amount of the Signing Bonus based on the length of your service with the Company. Such repayment shall be made within 30 days following your employment termination or resignation date, as applicable.

6. **Compliance with Confidentiality Agreement and Company Policies.** As a condition of employment, you shall sign and comply with the Company's standard form of Employee Confidential

Information and Invention Assignment Agreement (the “**Confidentiality Agreement**”). The Confidentiality Agreement shall be deemed fully incorporated into this Agreement by reference.

7. COVID-19 Vaccination. The Company requires COVID-19 vaccinations as a condition of employment. If you have any questions about COVID-19 vaccinations, you should consult a trusted healthcare provider. Unless an exemption applies, the Company requires that all employees be fully vaccinated before their Start Date. An employee is considered “fully vaccinated” if at least 14 days or a period specified by the vaccine’s manufacturer have elapsed since the employee received the last dose of a vaccine that the FDA has authorized for use in the United States. FDA-authorized vaccinations include vaccinations that have been authorized pursuant to an Emergency Use Authorization. For an employee fully vaccinated outside of the United States, the vaccination must be listed for emergency use by the World Health Organization (“**WHO**”).

To establish that you are fully vaccinated, we require that you provide evidence of immunization by presenting a completed COVID-19 Vaccine Card or documentation from an authorized healthcare provider or pharmacy proving that you have received the COVID-19 vaccine. Please submit these documents to Brandon Saunders at _____ or via the Company’s HR portal. The Company must receive this documentation prior to your projected Start Date.

Employees who have i) a qualifying medical condition that contraindicates the vaccination, or ii) who object to being vaccinated on the basis of a sincerely held religious belief or practice, may contact Jennifer Bush at _____. The Company regards all such information as confidential.

8. Protection of Third-Party Information and Outside Activities.

(a) Third Party Information. In your work for the Company, you will be expected not to make any unauthorized use or disclosure of any confidential information or materials, including trade secrets, of any former employer or other third party; and not to violate any lawful agreement that you may have with any third party. By signing this Agreement, you represent that you are able to perform your job duties within these guidelines, and you are not in unauthorized possession or control of any confidential documents, information, or other property of any former employer. In addition, you represent that you have disclosed to the Company in writing any agreement you may have with any third party (e.g., a former employer) that may limit your ability to perform your duties to the Company or that could present a conflict of interest with the Company, including but not limited to disclosure (and a copy) of any contractual restrictions on solicitations or competitive activities.

(b) Outside Activities. During your employment by the Company, you may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of your duties hereunder or present a conflict of interest with the Company or its affiliates. Subject to the restrictions set forth herein, and only with prior written disclosure to and written consent of the Board, you may engage in other types of business or public activities. The Board may withdraw such consent, if the Board determines, in its sole discretion, that such activities compromise or threaten to compromise the business interests of the Company or its affiliates or conflict with your duties to the Company.

(c) Non-Competition. During your employment by the Company, you will not, without the express written consent of the Board, directly or indirectly serve as an officer, director, stockholder, employee, partner, proprietor, investor, joint venturer, associate, representative or consultant of any person or entity engaged in, or planning or preparing to engage in, business activity

competitive with any line of business engaged in (or planned to be engaged in) by the Company or its affiliates; provided, however, that you may purchase or otherwise acquire up to (but not more than) one percent (1%) of any class of securities of any enterprise (without participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange. In addition, you will be subject to certain restrictions (including restrictions continuing after your employment ends) under the terms of your Confidentiality Agreement.

9. At-Will Employment Relationship. Your employment relationship with the Company is employment at-will. Accordingly, you may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company; and the Company may terminate your employment at any time with or without Cause (as defined below) or prior notice. In addition, the Company retains the discretion to modify your other employment terms from time to time, including but not limited to your position, duties, reporting relationship, work location, compensation (including base salary and incentive compensation terms), and benefits.

10. Severance.

(a) Pre-IPO Severance for Qualifying Termination. If (i) your employment is terminated by the Company without Cause (as defined in the Plan, or any successor or replacement plan), other than due to your death or disability, and (ii) you satisfy the Release Requirement (defined below), then you will receive severance pay in the form of continuation of your final monthly base salary for six (6) months, plus six (6) months of benefits coverage under COBRA, less standard payroll deductions and tax withholdings.

(b) Post-IPO Severance upon Termination without Cause or Resignation with Good Reason. If (i) your employment is terminated by the Company without Cause (as defined in the Plan), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following “Severance Benefits”: (A) You will receive severance pay in the form of continuation of your final monthly base salary for a period of nine (9) months following your termination date, less standard payroll deductions and tax withholdings (the “**Severance Payments**”). Subject to Section 10(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; (B) In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending nine (9) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the “**COBRA Payment Period**”). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the “**Health Care Benefit Payment**”). The Health Care Benefit Payment shall be paid in installments on the same schedule

that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; and (C) The vesting and exercisability of all outstanding and unvested equity awards covering the Company's common stock that are held by you as of immediately prior to the termination date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional three (3) months of service with the Company as of the termination date.

(c) Post-IPO Severance upon Termination without Cause or Resignation with Good Reason in Connection with a Change of Control. If (i) your employment is terminated by the Company without Cause (as defined in the Plan), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), in each case within a period commencing three (3) months before, or twelve (12) months after a Change of Control (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following "Change of Control Severance Benefits": (A) You will receive severance pay in the form of continuation of your final monthly base salary for a period of twelve (12) months following your termination date, less standard payroll deductions and tax withholdings (the "Change of Control Severance Payments"). Subject to Section 10(e), the Severance Payments will be paid in equal installments on the Company's regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a "catch up" payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; (B) In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending twelve (12) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the "**COBRA Payment Period**"). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the "Health Care Benefit Payment"). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; (C) In addition, you will receive your full target Annual Bonus

for the fiscal year in which your employment terminates, payable on the first regular payroll date following the Release Effective Date, provided that the Release Requirement has been satisfied; and (D) Effective as of the later of the termination date or the effective date of the Change of Control, the vesting and exercisability of all outstanding and unvested equity awards covering the Company's common stock that are held by you as of immediately prior to such date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in full. For the avoidance of doubt, in no event shall you be entitled to benefits under both Section 10(b) and this Section 10(c). If you are eligible for benefits under both Section 10(b) and this Section 10(c), you shall receive the benefits set forth in this Section 10(c) and such benefits shall be reduced by any benefits previously provided to you under Section 10(b).

(d) **Release Requirement.** To be eligible for the Severance Benefits pursuant to Section 10(a)-(b) and the Change of Control Severance Benefits pursuant to Section 10(c) above, you must satisfy the following release requirement (the "**Release Requirement**"): You must timely execute and return to the Company a signed and dated general release of all known and unknown claims in a separation agreement acceptable to the Company (the "**Release and Waiver**") within the applicable deadline set forth therein, but in no event later than forty-five (45) calendar days following your termination date, and permit the Release and Waiver to become effective and irrevocable in accordance with its terms (such effective date of the Release and Waiver, the "**Release Effective Date**"). No Severance Benefits or Change of Control Severance Benefits will be paid or provided hereunder prior to such Release Effective Date. You may be required by the separation agreement to provide reasonable transitional services as a condition to receiving the Severance Benefits and/or the Change of Control Severance Benefits.

(e) **Other.** You will not be eligible for any Severance Benefits or Change of Control Severance Benefits under any circumstances other than those described herein, including circumstances in which your employment is terminated for Cause, you terminate your employment for any reason other than Good Reason, or your employment terminates due to your death or disability. In addition, if you materially breach any continuing obligations to the Company (including, but not limited to, any material breach of this Agreement or any material breach of the Confidentiality Agreement) during the period of time that you are receiving any Severance Benefits or Change of Control Severance Benefits, as applicable, you will forfeit your entitlement to any then unpaid Severance Benefits and/or Change of Control Severance Benefits, as applicable, and the Company's obligation to continue to pay or provide such Severance Benefits and Change of Control Severance Benefits will immediately terminate as of the date of your material breach and you will be required to return to the Company any Severance Benefits and Change of Control Severance Benefits already provided to you.

(f) **IRS Code Section 409A.** All payments provided hereunder are intended to constitute separate payments for purposes of Treasury Regulation Section 1.409A-2(b)(2). If the Company determines that any benefits provided under this Agreement constitute "deferred compensation" under Section 409A of the Internal Revenue Code of 1986 as amended ("**Section 409A**"), such benefits will not commence in connection with your termination of employment unless such termination also qualifies as a "separation from service" with the Company within the meaning of Treasury Regulation Section 1.409A-1(h) (without regard to any permissible alternative definition thereunder) ("**Separation from Service**"). If the Company determines that any benefits provided under this Agreement constitute "deferred compensation" under Section 409A and you are a "specified employee" of the Company or any affiliate (or any successor entity thereto) within the meaning of Section 409A(a)(2)(B)(i) of the Code on the date of your Separation from Service, then the payment of any such benefits shall be delayed until the earlier

of (i) the date that is six (6) months and one (1) day after the date of your Separation from Service, or (ii) the date of your death (such date, the “**Delayed Payment Date**”), and the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the benefit payments that otherwise would have been paid to you on or before the Delayed Payment Date, without any adjustment on account of such delay, and (B) continue the benefit payments in accordance with any applicable payment schedules set forth for the balance of the period specified herein. In addition to the above, to the extent required to comply with Section 409A and the applicable regulations and guidance issued thereunder, if the applicable deadline for you to execute (and not revoke) the applicable Release and Waiver spans two (2) calendar years, your Severance Benefits and/or Change of Control Severance Benefits shall commence to be paid in installments on the first regularly scheduled payroll date that follows the effective date of the Release and Waiver and which also occurs during the second permitted calendar year for returning the effective Release and Waiver.

11. Section 280G; Limitations on Payment.

(a) If any payment or benefit you will or may receive from the Company or otherwise (a “**280G Payment**”) would (i) any constitute a “parachute payment” within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “**Excise Tax**”), then any such 280G Payment provided pursuant to this Agreement (a “**Payment**”) shall be equal to the Reduced Amount. The “**Reduced Amount**” shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the “**Reduction Method**”) that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the “**Pro Rata Reduction Method**”).

(b) Notwithstanding any provision of Section 12(a) to the contrary, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (i) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (ii) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (iii) as a third priority, Payments that are “deferred compensation” within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(c) Unless you and the Company agree on an alternative accounting firm or law firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change of Control transaction shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity

or group effecting the Change in Control transaction, the Company shall appoint a nationally recognized accounting or law firm to make the determinations required by this Section 9. The Company shall bear all expenses with respect to the determinations by such accounting or law firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting or law firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other time as requested by you or the Company.

(d) If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of Section 12(a) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you agree to promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of Section 12(a) so that no portion of the remaining Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of Section 12(a), you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

12. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with the Company, or the termination of your employment with the Company, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted by JAMS, Inc. (“JAMS”) or its successors by a single arbitrator. The arbitration will be held in San Diego, California, or such other location as then-agreed by the parties. ***Both you and the Company acknowledge that by agreeing to this arbitration procedure, you each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.***

Any such arbitration proceeding will be governed by JAMS’ then applicable rules and procedures for employment disputes, which will be provided to you upon request and also currently available at <http://www.jamsadr.com/rules-employment-arbitration/>. In any such proceeding, the arbitrator shall (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator’s essential findings and conclusions and a statement of the award. You and the Company shall be entitled to all rights and remedies that would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or you from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. You and the Company both have the right to be represented by legal counsel at any arbitration proceeding, at each party’s own expense. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law and shall pay the arbitrator’s fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

13. General. This Agreement, along with the Confidentiality Agreement, forms the complete and exclusive statement of your agreement with the Company regarding the subject matter hereof. It supersedes and replaces any other agreements or promises made to you by anyone concerning your employment compensation, benefits and/or terms, whether oral or written. This Agreement may not be

amended or modified except by a written modification signed by you and a duly authorized officer of the Company, with the exception of those changes expressly reserved to the Company's discretion in this Agreement. This Agreement is governed by the laws of the state of California, without reference to conflicts of law principles, and it is intended to bind and inure to the benefit of and be enforceable by the Company and its successors and assigns. If any provision of this Agreement shall be held invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect the other provisions of this Agreement, and such provision will be reformed, construed and enforced so as to render it valid and enforceable consistent with the general intent of the parties insofar as possible under applicable law. With respect to the enforcement of this Agreement, no waiver of any right hereunder shall be effective unless it is in writing. Any ambiguity in this Agreement shall not be construed against either party as the drafter. This Agreement may be executed in counterparts which shall be deemed to be part of one original, and facsimile signatures shall be equivalent to original signatures.

This offer is subject to satisfactory proof of your identity and right to work in the United States and other applicable pre-employment screenings.

To confirm your terms of employment, please sign and date this Agreement and the Confidentiality Agreement and return the fully signed documents to Jennifer Bush at jbush@artivabio.com. Please let me know if you have any questions.

Sincerely,

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Peter Flynn, PhD
Peter Flynn, PhD
Chief Operating Officer

Reviewed, Understood, and Accepted:

/s/ Chris Horan
Chris Horan

12/7/2021
Date

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the “**Agreement**”) is sat by and between **ARTIVA BIOTHERAPEUTICS, INC.** (“**Company**”) and **MEF CONSULTING LLC**, a Limited liability company (“**Consultant**”), effective as of April 3, 2023 (the “**Effective Date**”).

Company dean to benefit from Consultant’s expertise and experience by retaining Consultant as a consultant, and Consultant wishes to perform consulting services for Company, as provided for below. Accordingly, Company and Consultant agree as follows:

1. ENGAGEMENT OF SERVICES. Subject to the terms of this Agreement, Consultant agrees to provide consulting services to Company as described in **EXHIBIT A** hereto (collectively, the “**Services**”) during the term of this Agreement. Consultant agrees to exercise diligence and the highest degree of professionalism in providing Services under this Agreement. Company will make its facilities and equipment available to Consultant when necessary. Consultant may not subcontract or otherwise delegate his obligations under this Agreement without Company’s prior written consent. Consultant shall perform all Services in compliance with all applicable laws.

2. COMPENSATION. As sole compensation for the performance of the Services, Company will pay to Consultant the amounts and on the schedule specified in **EXHIBIT A**. Consultant will be reimbursed for expenses as specified in **EXHIBIT A**.

3. INDEPENDENT CONTRACTOR RELATIONSHIP. is that of an independent contractor, and nothing in this Agreement is intended to, or should be construed to, create a partnership, agency, joint venture or employment relationship with Company and Consultant. Consultant is not entitled to and will be excluded from participating in any of Company’s fringe benefit plans or programs as a result of the performance of the Services, including, but not limited to, health, sickness, accident or dental coverage, life insurance, disability benefits, accidental death and dismemberment coverage, unemployment insurance coverage, workers’ compensation coverage, and pension or 401(k) benefit(s) provided by Company to its employees (and Consultant waives the right to receive any such benefits). Consultant agrees, as an independent contractor, that he is not entitled to unemployment benefits in the event this Agreement terminates, or workers’ compensation benefits in the event that he is injured in any manner or becomes ill while performing the Services under this Agreement. Consultant is solely responsible for all tax returns, payments, or reports required to be filed with or made to any federal, state or local tax authority with respect to Services and receipt of fees under this Agreement. Consultant has discretion to set its own hours. Consultant is not authorized to make any representation, contract or commitment on behalf of Company, unless specifically requested or authorized to do so by an executive officer of Company. No part of Consultant s compensation will be subject to withholding by Company for the payment of any social security, federal, state or any other employee payroll taxes. Company will regularly report any amounts paid to Consultant by filing Form 1099-MISC with the Internal Revenue Service as required by law. Consultant hereby agrees to indemnify and defend Company against any and all income and employment taxes or contributions owed as a result of any fees and payments made to Consultant hereunder, including penalties and interest.

4. TRADE SECRETS; INTELLECTUAL PROPERTY RIGHTS.

4.1 Confidential Information. Consultant agrees during the term of this Agreement and thereafter that he will take all steps necessary to hold Company's Confidential Information in trust and confidence, will not use Confidential Information in any manner or for any purpose not expressly set forth in this Agreement, and will not disclose any such Confidential Information to any third party without first obtaining Company's express written consent on a case-by-case basis. "**Confidential Information**" includes, but is not limited to, all information related to Company's business and its actual or anticipated research and development, including without limitation (a) trade secrets, inventions, ideas, processes, computer source and object code, formulae, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products or plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, clients and customers; (c) information regarding the skills and compensation of Company's employees, contractors, and any other service providers of Company; and (d) the existence of any business discussions, negotiations, or agreements between Company and any third party. In addition, "**Company Work Product**" (defined below) shall constitute Confidential Information. Notwithstanding the other provisions of this Agreement, nothing received by Consultant will be considered to be Confidential Information if Consultant can demonstrate by clear and convincing evidence that: (i) it has been published or is otherwise readily available to the public other than by a breach of this Agreement; (ii) it has been rightfully received by Consultant from a third party without confidential limitations; (iii) it has been independently developed for Consultant by personnel or agents having no access to Company Confidential Information, as evidenced by Consultant's written records; or (iv) it was known to Consultant prior to its first receipt from Company, except in the case of Company Work Product, which shall not be subject to the exception in this Section 4.1. Further, notwithstanding the other provisions of this Agreement, pursuant to 18 U.S.C. Section 1833(b), Consultant shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and solely for the purpose of reporting or investigating a suspected violation of law; or is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

4.2 Third Party Information. Consultant understands that Company has received and will in the future receive from third parties confidential or proprietary information ("**Third Party Information**") subject to a duty on Company's part to maintain the confidentiality of such information and use it only for certain limited purposes. Consultant agrees to hold Third Party Information in confidence and not to disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or to use, except in connection with Consultant's work for Company, Third Party Information unless expressly authorized in writing by an executive officer of Company.

4.3 No Conflict of Interest. Consultant agrees during the term of this Agreement not to accept work or enter into a contract or accept an obligation inconsistent or incompatible with Consultant's obligations under this Agreement or the scope of services rendered for Company. Consultant warrants that to the best of his knowledge, there is no other existing contract or duty on Consultant's part inconsistent with this Agreement. Consultant further agrees not to disclose to Company, or bring onto Company's premises, or induce Company to use any confidential information that belongs to anyone other than Company or Consultant.

4.4 Disclosure of Work Product. As used in this Agreement, the term “**Work Product**” means any trade secrets, ideas, inventions (whether patentable or unpatentable), mask works, processes, procedures, formulations, formulas, software source and object codes, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs and techniques, trademarks, manufacturing techniques, or other copyrightable or patentable works. Consultant agrees to disclose promptly in writing to Company, or any person designated by Company, all Work Product that is solely or jointly conceived, made, reduced to practice, or learned by Consultant in the course of any work or Services performed for Company (“**Company Work Product**”).

4.5 Assignment of Company Work Product. Consultant irrevocably assigns to Company all right, title, and interest worldwide in and to Company Work Product and all applicable intellectual property rights related to Company Work Product, including without limitation, copyrights, trademarks, trade secrets, patents, moral rights, contract, and licensing rights (the “**Proprietary Rights**”). Consultant retains no rights to use Company Work Product and agrees not to challenge the validity of Company’s ownership in Company Work Product.

4.6 Waiver of Assignment of Other Rights. If Consultant has any rights to Company Work Product that cannot be assigned to Company, Consultant unconditionally and irrevocably waives the enforcement of such rights and all claims and causes of action of any kind against Company with respect to such rights. Consultant agrees, at Company’s request and expense, to consent to and join in any action to enforce such rights. If Consultant has any right to Company Work Product that cannot be assigned to Company or waived by Consultant, Consultant unconditionally and irrevocably grants to Company during the term of such rights, an exclusive, irrevocable, perpetual, worldwide, fully paid and royalty-free license, with rights to sublicense through multiple levels of sublicensees, to reproduce, create derivative works of, distribute, publicly perform and publicly display by all means now known or later developed, such rights.

4.7 Assistance. Consultant agrees to cooperate with Company or its designee(s), both during and after the term of this Agreement, in the procurement and maintenance of Company’s rights in Company Work Product, and to execute, when requested, any other documents deemed necessary by Company to carry out the purpose of this Agreement.

4.8 Enforcement of Proprietary Rights. Consultant will assist Company in every proper way to obtain, and from time to time enforce, United States and foreign Proprietary Rights relating to Company Work Product in any and all countries. To that end Consultant will execute, verify, and deliver such documents and perform such other acts (including appearances as a witness) as Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining, and enforcing such Proprietary Rights and the assignment thereof. In addition, Consultant will execute, verify, and deliver assignments of such Proprietary Rights to Company or its designee. Consultant’s obligation to assist Company with respect to Proprietary Rights relating to such Company Work Product in any and all countries shall continue beyond the termination of this Agreement, but Company shall compensate Consultant at a reasonable rate after such termination for the time actually spent by Consultant at Company’s request on such assistance.

4.9 Execution of Documents. In the event Company is unable for any reason, after reasonable effort, to secure Consul the actions specified in the preceding Sections 4.7 and 4.8, Consultant hereby irrevocably designates and appoints Company and its duly authorized officers and agents as agent and attorney in fact, which appointment is coupled with an interest, to act for and in its behalf to execute, verify, and file any such documents and to do all other lawfully permitted acts to further the purposes of the preceding paragraph with the same legal force and effect as if executed by Consultant. Consultant hereby waives and quitclaims to Company any and all claims, of any nature whatsoever, which Consultant now or may hereafter have for infringement of any Proprietary Rights assigned hereunder to Company.

5. CONSULTANT REPRESENTATIONS AND WARRANTIES.

5.1 Representations. Consultant hereby represents and warrants that (a) Company Work Product will be an original work of Consultant; (b) neither Company Work Product nor any element thereof will be subject to any restrictions or to any mortgages, liens, pledges, security interests, encumbrances, or encroachments; (c) Consultant will not grant, directly or indirectly, any rights or interest whatsoever in Company Work Product to third parties; and (d) Consultant has full right and power to enter into and perform this Agreement without the consent of any third party.

5.2 Debarment. Consultant warrants that he is not and has not previously been (a) debarred under 21 U.S.C. § 335(a) or other law; (b) debarred or excluded under 42 U.S.C. § 1320a-7 or other law from participation in the Medicare program, any state Medicaid program or any other federal health care program, (c) disqualified as described in 21 C.F.R. § 812.119, (d) charged with, indicted for or convicted of a criminal offense that would lead to debarment under 21 U.S.C. 335a or other law, or exclusion from participation in the Medicare program, any state Medicaid program or any other federal health care program; or (d knowledge, under investigation by any government body for debarment, disqualification or exclusion action. Consultant further warrants and covenants it has not, and shall not, knowingly employ, contract with, or retain any person or entity directly or indirectly to perform Services under this Agreement if such a person or entity is or has been (i) debarred under 21 U.S.C. § 335(a) or other law; (ii) debarred or excluded under 42 U.S.C. § 1320a-7 or other law from participation in the Medicare program, any state Medicaid program or any other federal health care program, (iii) disqualified as described in 21 C.F.R. § 812.119, (iv) charged with, indicted for or convicted of a criminal offense that would lead to debarment under 21 U.S.C. 335a or other law, or exclusion from participation in the Medicare program, any state Medicaid program or any other federal health care program; or (v) to Consultant's actual knowledge, under investigation by any government body for debarment, disqualification or exclusion action. In the event that Consultant becomes aware of or receives notice of any debarment, exclusion, disqualification or investigation described above of Consultant or any person or entity directly or indirectly involved in the performance of the Services, Consultant shall notify Company in writing.

6. TERM AND TERMINATION.

6.1 Term. Subject to Sections 6.1 and 6.2 below, the term of this Agreement will begin as of the Effective Date and will continue for a period of 6 months, unless earlier terminated by either party in accordance with this Section 6.

6.2 Termination by Company. Company may terminate this Agreement at its convenience and without any breach by Consultant upon 30 days prior written notice to Consultant. Company may also terminate this Agreement immediately in its sole discretion upon this Agreement.

6.3 Termination by Consultant. Consultant may terminate this Agreement at any time upon 30 days prior written notice to Company.

6.4 Noninterference. During the term of this Agreement and for a period of one year immediately following termination of this Agreement by either party, Consultant agrees not to solicit or induce (or attempt to solicit or induce) any employee, consultant, agent, or independent contractor to terminate or breach an employment, contractual, or other relationship with Company.

6.5 Conflicts. Consultant agrees that during the term of this Agreement, in the event that Consultant agreement to perform services anywhere in the world for, or in any way manage, operate, join, control or participate in the ownership, management, operation or control of, or be connected to as an employee, shareholder, director, manager, member, consultant, adviser, volunteer, partner or otherwise, whether for compensation or not, any entity that engages in the research, development, manufacturing, production, marketing or sale of cellular immunotherapies utilizing natural killer cells, Consultant shall immediately notify Company, and Company shall have the right to immediately terminate this agreement.

6.6 Return of Company Property. Unless otherwise authorized by Company, upon termination of the Agreement or earlier as requested by Company, Consultant will deliver to Company any and all drawings, notes, memoranda, specifications, devices, formulas, and documents, together with all copies thereof, and any other material containing or disclosing any Company Work Product, Third Party Information, or Proprietary Information of Company. Consultant further agrees that any Company, including all forms of storage media, filing cabinets or other work areas, is subject to inspection by Company personnel at any time with or without notice.

6.7 Survival. The following provisions shall survive termination of this Agreement: Section 4, Section 5, Section 6.4, Section 6.5, Section 6.6, Section 7 and Section 8.

7. INDEMNIFICATION. Consultant will indemnify, defend and hold Company harmless from and against any and all losses, claims, and expenses (including reasonable attorneys' fees) directly or indirectly arising out of, or resulting from, (a) Consultant's commission of any act or omission related to the Services he performs; (b) Consultant's unauthorized use of any Confidential Information; or, (c) Consultant's breach of any representation, warranty, or covenant contained in this Agreement, or otherwise made to the Company.

8. GENERAL PROVISIONS.

8.1 Governing Law. This Agreement shall be governed and construed in accordance with the laws of the State of California and all claims relating to or arising out of this Agreement, or the breach thereof, whether sounding in contract, tort or otherwise, shall likewise be governed by the laws of the state of California. The parties consent to and agree that service of any summons and complaint or other process in any such action or proceeding may be made by registered or certified mail in addition to personal service, or any other form of service contemplated by the laws of the state of California.

8.2 Severability. In case any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect the other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein. If moreover, any one or more of the provisions contained in this Agreement shall for any reason be held to be excessively broad as to duration, geographical scope, activity, or subject, it shall be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it shall then appear.

8.3 No Assignment. This Agreement may not be assigned by Consultant without consent, and any such attempted assignment shall be void and of no effect.

8.4 Notices. All notices, requests, and other communications under this Agreement must be in writing and must be mailed by registered or certified mail, postage prepaid and return receipt requested, electronic mail, or delivered by hand to the party to whom such notice is required or permitted to be given. If mailed, any such notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If emailed, any such notice will be considered to have been given upon acknowledgment of receipt of electronic transmission. If delivered by hand, any such notice will be considered to have been given when received by the party to whom notice is given, as evidenced by written and dated receipt of the receiving party. The address for notice to either party will be the address shown on the signature page of this Agreement. Either party may change its address by notice as provided by this section.

8.5 Legal Fees. If any dispute arises between the parties with respect to the matters covered by this Agreement which leads to a proceeding to resolve such dispute, the prevailing party in such proceeding shall be entitled to receive its reasonable attorneys fees, expert witness fees, and out-of-pocket costs incurred in connection with such proceeding, in addition to any other relief it may be awarded.

8.6 Injunctive Relief. A breach of any of the promises or agreements contained in this Agreement may result in irreparable and continuing damage to Company for which there may be no adequate remedy at law, and Company is therefore entitled to seek injunctive relief as well as such other and further relief as may be appropriate.

8.7 Waiver. No waiver by Company of any breach of this Agreement shall be a waiver of any preceding or succeeding breach. No waiver by Company of any right under this Agreement shall be construed as a waiver of any other right. Company shall not be required to give notice to enforce strict adherence to all terms of this Agreement.

8.8 Entire Agreement. This Agreement is the final, complete, and exclusive agreement of the parties with respect to the subject matter hereof. This Agreement supersedes all prior discussions between the parties. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by Consultant and an executive officer of Company. The terms of this Agreement will govern all Services undertaken by Consultant for Company.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have caused this Consulting Agreement to be executed by their duly authorized representative.

COMPANY:

ARTIVA BIOTHERAPEUTICS, INC.

By: */s/ Fred Aslan*

Name: Fred Aslan

Title: CEO

Address: Artiva Biotherapeutics
 5505 Morehouse Drive
 Suite 100
 San Diego, CA 92121
 USA

Email: Legal@artivabio.com

CONSULTANT:

MEF CONSULTING LLC

/s/ Michael Faerm

Name: Michael Faerm

Address: 15886 Angeline Place
 San Diego, CA 92127

EXHIBIT A
SERVICES

Amendment No. 1 to Consulting Agreement

This Amendment No. 1 (the “**Amendment**”), effective as of October 3, 2023, amends certain provisions of the Consulting Agreement dated April 3, 2023 (the “**Agreement**”), between Artiva Biotherapeutics, Inc. (“**Company**”), having its principal place of business at 5505 Morehouse Drive, Suite 100, San Diego, CA 92121 and MEF Consulting LLC (“**Consultant**”).

WHEREAS, Company and Consultant find it in their respective interests to amend the provisions of the Agreement.

NOW THEREFORE, pursuant to such provision and for consideration duly given, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree to the following:

1. Except as expressly amended hereby, the Agreement shall continue to remain in full force and effect in accordance with its terms.
2. The first sentence of Section 3 of the Agreement is hereby deleted in its entirety and replaced with the following: “Subject to Sections 6.2 and 6.3 below, the term of this Agreement will begin as of the Effective Date and will automatically terminate on December 31, 2023, unless the length of the term of this Agreement is extended in a writing signed by both parties.”
3. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which shall constitute together the same document. The Parties agree that signatures transmitted by electronic means (e.g. facsimile or a scanned version of the executed agreement in PDF format attached to an e-mail) shall bind the Parties. This Amendment is otherwise governed by the terms and conditions of the Original Agreement, except as amended hereby.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the undersigned parties have had this Amendment executed by its duly authorized representatives.

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Jennifer Bush

Printed Name: Jennifer Bush

Title: EVP , Chief Legal & People Officer

Email: legal@artivabio.com

MEF CONSULTING LLC

/s/ Michael E. Faerm

Email: _____



3/28/2023

Michael Faerm

Re: Separation Agreement

Dear Mike:

This letter sets forth the substance of the separation agreement (the “**Agreement**”) that **Artiva Biotherapeutics, Inc.** (the “**Company**”) is offering to you to aid in your employment transition.

1. **SEPARATION.** Your employment termination date will be March 31, 2023 (the “**Separation Date**”).

2. **ACCRUED WAGES PAID TIME OFF.** On the Separation Date, the Company will pay you all accrued wages, and all accrued and unused paid time off earned through the Separation Date, subject to standard payroll deductions and withholdings. You are entitled to these payments regardless of whether or not you sign this Agreement.

3. **SEVERANCE BENEFITS.** Although the Company has no obligation to do so, if you: (i) sign and return this Agreement to the Company on or within twenty-one (21) days after the Separation Date; (ii) allow the releases contained herein to become effective; (iii) remain available after your Separation Date to answer any questions from the Company regarding your previous job duties; and (iv) comply with all of your legal and contractual obligations to the Company, then the Company will provide you with the following severance benefits (the “**Severance Benefits**”):

(a) **Severance Payment.** The Company will pay you, as severance, an amount equivalent to six (6) months of your current base rate of pay in the total amount of \$222,800.00 subject to standard payroll deductions and withholdings (the “**Severance Payment**”). The Severance Payment will be paid to you in a lump sum on the Company’s regular payroll within fourteen (14) days after the Effective Date (as defined below).

(b) **Health Insurance; COBRA.** Your health insurance benefits will continue through March 31, 2023. To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company’s current group health insurance policies, you will be eligible to continue your group health insurance benefits at your own expense. Later, you may be able to convert to an individual policy through the provider of the Company’s health insurance, if you wish. If you timely elect continued coverage under COBRA, the Company will pay for the COBRA premiums to continue your health insurance coverage (including coverage for eligible dependents, if applicable) (“**COBRA Premiums**”) through the period (the

Artiva Biotherapeutics, Inc. | 5505 Morehouse Drive, Suite 100, San Diego CA 92121



“**COBRA Premium Period**”) starting on the Separation Date and ending on the earliest to occur of: (i) the last day of the sixth (6th) month following the Separation Date; (ii) the date you become eligible for group health insurance coverage through a new employer (or the date the new coverage becomes effective, if there is a required waiting period under the new employer’s group health insurance plan); or (iii) the date you cease to be eligible for COBRA continuation coverage for any reason. You must timely pay your premiums, and then provide the Company with proof of same to obtain reimbursement for your COBRA premiums under this Section. In the event you become covered under another employer’s group health plan or otherwise cease to be eligible for COBRA during the COBRA Premium Period, you must immediately notify the Company of such event. Notwithstanding the foregoing, if the Company determines, in its sole discretion, that it cannot pay the COBRA Premiums without a substantial risk of violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company instead shall pay you, on the first day of each calendar month, a fully taxable cash payment equal to the applicable COBRA premiums for that month for the remainder of the COBRA Premium Period, which you may (but are not obligated to) use toward the cost of COBRA premiums.

4. EQUITY.

(a) **Options.** You were granted an option award to purchase shares of the Company’s common stock, pursuant to the Company’s 2020 Equity Incentive Plan (the “**Plan**”), as set forth below. Under the terms of the Plan and your stock option grant, your Continuous Service (as defined in the Plan) and vesting will cease as of the Separation Date, and the table below sets forth the number of your vested option shares. Your entry into a consulting agreement with the Company shall not be deemed as a continuation of your Continuous Service under the Plan. Pursuant to your option agreement, you may choose to exercise the vested option shares by submitting an option exercise notice to the Company and paying the applicable option exercise price, by June 30, 2023.

<u>Grant Number</u>	<u>Exercise Price per Share</u>	<u>Total Shares Subject to Option</u>	<u>Vested Shares</u>
G-54	\$11.63	359,091	172,064

(b) **RSUs.** You were granted a RSU award pursuant to the Plan, as set forth below.

<u>Grant Number</u>	<u>Total Shares Subject to RSU</u>
R-1	98,750

As of the Separation Date, the Service-Based Requirement (as defined in the RSU award) has been satisfied as to 43,203 RSUs. As an additional severance benefit, subject to your entry into the Consulting Agreement dated April 3, 2023, Company will deem the Service-Based Requirement satisfied as to all unvested RSUs as of the Separation Date, such that the full grant for 98,750 RSUs will have satisfied the Service-Based Requirement as of the Separation Date.

5. NO OTHER COMPENSATION OR BENEFITS. You acknowledge that, except as expressly provided in this Agreement, you have not earned, and will not earn by the Separation Date, and will not receive from the Company any additional compensation (including base salary, bonus, incentive compensation, or equity, equity acceleration or vesting), severance, or benefits before or after the Separation Date, with the exception of any vested right you may have under the express terms of a written ERISA-qualified benefit plan (e.g., 401(k) account).



6. **EXPENSE REIMBURSEMENTS.** You agree that, within ten (10) calendar days after the Separation Date, you will submit your final documented expense reimbursement statement reflecting all business expenses you incurred through the Separation Date, if any, for which you seek reimbursement. The Company will reimburse you for these expenses pursuant to its regular business practice.

7. **RETURN OF COMPANY PROPERTY.** By no later than three (3) calendar days after the Separation Date, you will return to the Company all Company documents (and all copies thereof) and other Company property in your possession or control, including, but not limited to, Company files, notes, drawings, records, business plans and forecasts, contact information, financial information, specifications, training materials, computer-recorded information, tangible property including, but not limited to, computers, credit cards, entry cards, identification badges and keys; and any materials of any kind that contain or embody any proprietary or confidential information of the Company (and all reproductions thereof). You represent that you have made a diligent search to locate any such documents, property, and information within the required timeframe. In addition, if you have used any personally owned computer, server, e-mail system, mobile phone, portable electronic device (e.g., smartphone, iPad or the like), (collectively, “**Personal Systems**”) to receive, store, prepare or transmit any Company confidential or proprietary data, materials or information, then within three (3) calendar days after the Separation Date, you will permanently delete and expunge all such Company confidential or proprietary information from such Personal Systems without retaining any copy or reproduction in any form (in whole or in part). You agree that, after the applicable timeframes noted above, you will neither use nor possess Company property. Your timely compliance with this paragraph is a condition precedent to your receipt of the Severance Benefits described above.

8. **CONFIDENTIALITY.** The provisions of this Agreement will be held in strictest confidence by you and will not be publicized or disclosed by you in any manner whatsoever; provided, however, that: (a) you may disclose this Agreement in confidence to your immediate family and to your attorneys, accountants, tax preparers and financial advisors; (b) you may disclose this Agreement pursuant to a government investigation, if necessary to enforce its terms, or as otherwise required by law; and (c) you may make such statements and disclosures as set forth in the section of this Agreement entitled “**Protected Rights.**” Notwithstanding any provision in this Agreement to the contrary, nothing herein shall prevent you from disclosing the fact or terms of this Agreement as part of any government investigation, or prohibit you from filing a charge, complaint, or report with, or otherwise communicating with, providing information to, or cooperating, or participating with any investigation or proceeding by or before the Equal Employment Opportunity Commission, the United States Department of Labor, the National Labor Relations Board, the Occupational Safety and Health Administration, the Securities and Exchange Commission, or any other federal, state or local government agency or commission. Nothing in this Agreement in any way prohibits or is intended to restrict you from discussing the terms and conditions of your employment with co-workers, exercising protected rights under Section 7 of the National Labor Relations Act (NLRA), exercising protected rights to the extent that such rights cannot be waived by agreement, or otherwise disclosing information as permitted by law.



9. **NO ADMISSIONS.** You understand and agree that the promises and payments in consideration of this Agreement shall not be construed to be an admission of any liability or obligation by the Company to you or to any other person, and that the Company makes no such admission.

10. RELEASE OF CLAIMS.

(a) **General Release.** In exchange for the consideration provided to you under this Agreement to which you would not otherwise be entitled, you hereby generally and completely release the Company, and its affiliated, related, and subsidiary entities, and its and their current and former directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, insurers, affiliates, and assigns (collectively, the “**Released Parties**”) from any and all claims, liabilities and obligations, both known and unknown, that arise out of or are in any way related to events, acts, conduct, or omissions occurring prior to or on the date you sign this Agreement (collectively, the “**Released Claims**”).

(b) **Scope of Release.** The Released Claims include, but are not limited to: (i) all claims arising out of or in any way related to your employment with the Company, or the termination of that employment; (ii) all claims related to your compensation or benefits from the Company, including salary, bonuses, commissions, vacation, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership, equity, or profits interests in the Company; (iii) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing; (iv) all tort claims, including claims for fraud, defamation, emotional distress, negligence, personal injury, conversion, and discharge in violation of public policy; (v) all federal, state, and local constitutional, statutory, or regulatory claims, including claims for discrimination, harassment, retaliation, attorneys’ fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act of 1967 (as amended) (the “**ADEA**”), the California Labor Code (as amended), the California Family Rights Act (as amended), and the California Fair Employment and Housing Act (as amended); and all bases for recovering costs, fees, or other expenses incurred in these matters, including attorneys’ fees. You acknowledge that you have been advised, as required by California Government Code Section 12964.5(b)(4), that you have the right to consult an attorney regarding this Agreement and that you were given a reasonable time period of not less than five (5) business days in which to do so. You further acknowledge and agree that, in the event you sign this Agreement prior to the end of the reasonable time period provided by the Company, your decision to accept such shortening of time is knowing and voluntary and is not induced by the Company through fraud, misrepresentation, or a threat to withdraw or alter the offer prior to the expiration of the reasonable time period, or by providing different terms to employees who sign such an agreement prior to the expiration of the time period.

(c) **Non-released Claims.** Notwithstanding the foregoing, the following are not included in the Released Claims (the “**Non-released Claims**”): (i) any rights or claims for indemnification you may have pursuant to any written indemnification agreement with the Company to which you are a party or under applicable law; (ii) any rights which are not waivable as a matter of law; and (iii) any claims for breach of this Agreement.



(d) **Protected Rights.** You understand that nothing in this Agreement prevents you from filing, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission, the Department of Labor, the California Department of Fair Employment and Housing, or any other government agency, except that you acknowledge and agree that you hereby waive your right to any monetary benefits in connection with any such claim, charge or proceeding. Additionally, while this Agreement does not limit your right to receive an award for information provided to the Securities and Exchange Commission, you are otherwise waiving, to the fullest extent permitted by law, any and all rights you may have to individual relief based on any claims that you have released and any rights you have waived by signing this Agreement. Nothing in this Agreement prevents you from discussing or disclosing information about unlawful acts in the workplace, such as harassment or discrimination or any other conduct that you have reason to believe is unlawful.

(e) **ADEA Waiver.** You acknowledge that you are knowingly and voluntarily waiving and releasing any rights you may have under the ADEA, and that the consideration given for the waiver and release in this Section is in addition to anything of value to which you are already entitled. You further acknowledge that you have been advised, as required by the ADEA, that: (i) your waiver and release do not apply to any rights or claims that may arise after the date that you sign this Agreement; (ii) you should consult with an attorney prior to signing this Agreement (although you may choose voluntarily not to do so); (iii) you have twenty-one (21) days to consider this Agreement (although you may choose voluntarily to sign it earlier); (iv) you have seven (7) days following the date you sign this Agreement to revoke it (by providing written notice of your revocation to me); and (v) this Agreement will not be effective until the date upon which the revocation period has expired, which will be the eighth day after the date that this Agreement is signed by you provided that you do not revoke it (the “**Effective Date**”).

11. **SECTION 1542 WAIVER.** In giving the release herein, which includes claims which may be unknown to you at present, you acknowledge that you have read and understand Section 1542 of the California Civil Code, which reads as follows:

“A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release and that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.”

You hereby expressly waive and relinquish all rights and benefits under that section and any law of any other jurisdiction of similar effect with respect to your release of claims herein, including but not limited to your release of unknown claims.

12. **REPRESENTATIONS.** You hereby represent that you have been paid all compensation owed and for all hours worked, have received all the leave and leave benefits and protections for which you are eligible pursuant to the Family and Medical Leave Act, the California Family Rights Act, or otherwise, and have not suffered any on-the-job injury and has no known occupational diseases for which you have not already filed a workers’ compensation claim.



13. **CONTINUING OBLIGATIONS; NON-DISPARAGEMENT.** You acknowledge and reaffirm your continuing obligations under your signed Employee Confidential Information and Invention Assignment Agreement, attached hereto as Exhibit B and which is incorporated herein by reference, and agree to abide by those continuing obligations. You also agree not to disparage the Company, its officers, directors, employees, shareholders, and agents, in any manner likely to be harmful to its or their business, business reputation, or personal reputation; provided that you may respond accurately and fully to any question, inquiry or request for information when required by legal process. The Company agrees that its executives will not disparage you in any manner likely to be harmful to you or your business, business reputation, or personal reputation; provided that the Company and its executives may respond accurately and fully to any question, inquiry or request for information when required by legal process. In addition, nothing in this provision or this Agreement is intended to prohibit or restrain you in any manner from making disclosures protected under the whistleblower provisions of federal or state law or regulation, under Section 7 of the National Labor Relations Act's protections of protected concerted activities, or other applicable law or regulation or as set forth in the section of this Agreement entitled "**Protected Rights.**"

14. **NO VOLUNTARY ADVERSE ACTION.** You agree that you will not voluntarily (except in response to legal compulsion or as permitted under the section of this Agreement entitled "**Protected Rights**") assist any person in bringing or pursuing any proposed or pending litigation, arbitration, administrative claim or other formal proceeding against the Company, its parent or subsidiary entities, affiliates, officers, directors, employees, or agents.

15. **COOPERATION.** You agree to cooperate reasonably with the Company in connection with its actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters arising from events, acts, or failures to act that occurred during the period of your employment by the Company. Such cooperation includes, without limitation, making yourself available to the Company upon reasonable notice, without subpoena, to provide complete, truthful, and accurate information in witness interviews, depositions, and trial testimony. The Company will reimburse you for reasonable out-of-pocket expenses you incur in connection with any such cooperation (excluding foregone wages) and will make reasonable efforts to accommodate your scheduling needs.

16. **DISPUTE RESOLUTION.** You and the Company agree that any and all disputes, claims, or controversies of any nature whatsoever arising from, or relating to, this Agreement or its interpretation, enforcement, breach, performance or execution, your employment, or the termination of such employment (including, but not limited to, any statutory claims) (collectively, "**Claims**", each a "**Claim**"), shall be resolved, pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding, and confidential arbitration in San Diego, California (or another mutually acceptable location) conducted before a single neutral arbitrator by JAMS, Inc. ("**JAMS**") or its successor, under the then applicable JAMS Arbitration Rules and Procedures for Employment Disputes (available at <http://www.jamsadr.com/rules-employment-arbitration/>). **By agreeing to this arbitration procedure, both you and the Company waive the right to have any Claim resolved through a trial by jury or judge or an administrative proceeding.** You will have the right to be represented by legal counsel at any arbitration proceeding, at your own expense. This paragraph shall not apply to any action or claim that cannot be subject to mandatory arbitration as a matter of law, including, without limitation, claims brought pursuant to the California Private Attorneys General Act of 2004, as amended, to the extent such claims are not permitted by applicable law to be submitted to mandatory arbitration and the



applicable law(s) are not preempted by the Federal Arbitration Act or otherwise invalid (collectively, the “**Excluded Claims**”). In the event you intend to bring multiple claims, including one of the Excluded Claims listed above, the Excluded Claims may be publicly filed with a court, while any other claims will remain subject to mandatory arbitration. The arbitrator shall have sole authority for determining if a Claim is subject to arbitration, and any other procedural questions related to the dispute and bearing on the final disposition. In addition, the arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be available under applicable law in a court proceeding; and (b) issue a written statement signed by the arbitrator regarding the disposition of each claim and the relief, if any, awarded as to each claim, the reasons for the award, and the arbitrator’s essential findings and conclusions on which the award is based. The Company shall pay all JAMS arbitration fees. Nothing in this Agreement shall prevent you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

17. MISCELLANEOUS. This Agreement, including the Exhibits, constitutes the complete, final, and exclusive embodiment of the entire agreement between you and the Company with regard to its subject matter. It is entered into without reliance on any promise or representation, written or oral, other than those expressly contained herein, and it supersedes any other such promises, warranties, or representations. This Agreement may not be modified or amended except in a writing signed by both you and a duly authorized officer of the Company. This Agreement will bind the heirs, personal representatives, successors and assigns of both you and the Company, and inure to the benefit of both you and the Company, their heirs, successors, and assigns. The Company may freely assign this Agreement without your prior written consent. You may not assign any of your duties hereunder and you may not assign any of your rights hereunder without the written consent of the Company. If any provision of this Agreement is determined to be invalid or unenforceable, in whole or in part, this determination will not affect any other provision of this Agreement and the provision in question will be modified so as to be rendered enforceable. This Agreement will be deemed to have been entered into and will be construed and enforced in accordance with the laws of the State of California without regard to conflict of laws principles. Any ambiguity in this Agreement shall not be construed against either party as the drafter. Any waiver of a breach of this Agreement shall be in writing and shall not be deemed to be a waiver of any successive breach. This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures were upon the same instrument. Signatures on this Agreement communicated by facsimile or other similar electronic transmission or a digital signature provided through DocuSign®, Adobe Sign (or some other similar service) shall be considered an original signature, and the use of electronic signatures and the keeping of records in electronic form be granted the same legal effect, validity, or enforceability as a signature affixed by hand or the use of a paper-based record keeping system to the extent and as provided for in any applicable law including the Federal Electronic Signatures in Global and National Commerce Act, California digital signature regulations, or any other similar state laws based on the Uniform Electronic Transactions Act.

[Signature page follows]

Artiva Biotherapeutics, Inc. | 5505 Morehouse Drive, Suite 100, San Diego CA 92121



If this Agreement is acceptable to you, please sign below and return the original to _____ . You have twenty-one (21) calendar days to decide whether you would like to accept this Agreement, and the Company's offer contained herein will automatically expire if you do not sign and return it within this timeframe.

We wish you the best in your future endeavors.

Sincerely,

ARTIVA BIOTHERAPEUTICS, INC.

/s/ Fred Aslan
Signature

4/11/2023
Date

Fred Aslan, MD
Name

Chief Executive Officer
Title

EXHIBIT A – Consulting Agreement

EXHIBIT B – Employee Confidential Information and Invention Assignment Agreement

I HAVE READ, UNDERSTAND, AND AGREE FULLY TO THE FOREGOING AGREEMENT:

/s/ Michael E. Faerm
Signature

4/11/2023
Date

Michael E. Faerm
Name

Artiva Biotherapeutics, Inc. | 5505 Morehouse Drive, Suite 100, San Diego CA 92121



Exhibit A

CONSULTING AGREEMENT

Artiva Biotherapeutics, Inc. | 5505 Morehouse Drive, Suite 100, San Diego CA 92121



Exhibit B

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT

Artiva Biotherapeutics, Inc. | 5505 Morehouse Drive, Suite 100, San Diego CA 92121



3/30/2023

Peter Flynn, PhD

Re: Separation Agreement

Dear Pete:

This letter sets forth the substance of the separation agreement (the “**Agreement**”) that **Artiva Biotherapeutics, Inc.** (the “**Company**”) is offering to you to aid in your employment transition.

1. **SEPARATION.** Your employment termination date will be March 31, 2023 (the “**Separation Date**”).

2. **ACCRUED WAGES PAID TIME OFF.** On the Separation Date, the Company will pay you all accrued wages, and all accrued and unused paid time off earned through the Separation Date, subject to standard **payroll** deductions and withholdings. You are entitled to these payments regardless of whether or not you sign this Agreement.

3. **SEVERANCE BENEFITS.** Although the Company has no obligation to do so, if you: (i) sign and return this Agreement to the Company on or within twenty-one (21) days after the Separation Date; (ii) allow the releases contained herein to become effective; (iii) remain available after your Separation Date to answer any questions from the Company regarding your previous job duties; and (iv) comply with all of your legal and contractual obligations to the Company, then the Company will provide you with the following severance benefits (the “**Severance Benefits**”):

(a) **Severance Payment.** The Company will pay you, as severance, an amount equivalent to six (6) months of your current base rate of pay in the total amount of \$239,350 subject to standard payroll deductions and withholdings (the “**Severance Payment**”). The Severance Payment will be paid to you in a lump sum on the Company’s regular payroll within fourteen (14) days after the Effective Date (as defined below).

(b) **Health Insurance; COBRA.** Your health insurance benefits will continue through March 31, 2023. To the extent provided by the federal COBRA law or, if applicable, state insurance laws, and by the Company’s current group health insurance policies, you will be eligible to continue your group health insurance benefits at your own expense. Later, you may be able to convert to an individual policy through the provider of the Company’s health insurance, if you wish. If you timely elect continued coverage under COBRA, the Company will pay for the COBRA premiums to continue your health insurance coverage (including coverage

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for eligible dependents, if applicable) (“**COBRA Premiums**”) through the period (the “**COBRA Premium Period**”) starting on the Separation Date and ending on the earliest to occur of: (i) the last day of the sixth (6th) month following the Separation Date; (ii) the date you become eligible for group health insurance coverage through a new employer; or (iii) the date you cease to be eligible for COBRA continuation coverage for any reason. You must timely pay your premiums, and then provide the Company with proof of same to obtain reimbursement for your COBRA premiums under this Section. In the event you become covered under another employer’s group health plan or otherwise cease to be eligible for COBRA during the COBRA Premium Period, you must immediately notify the Company of such event. Notwithstanding the foregoing, if the Company determines, in its sole discretion, that it cannot pay the COBRA Premiums without a substantial risk of violating applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company instead shall pay you, on the first day of each calendar month, a fully taxable cash payment equal to the applicable COBRA premiums for that month for the remainder of the COBRA Premium Period, which you may (but are not obligated to) use toward the cost of COBRA premiums.

4. EQUITY.

(a) **Options.** You were granted option awards to purchase shares of the Company’s common stock, pursuant to the Company’s 2020 Equity Incentive Plan (the “**Plan**”), as set forth below. Under the terms of the Plan and your stock option grants, subject to your entry into the Consulting Agreement dated April 1, 2023 (attached hereto as Exhibit A, and hereafter the “**Consulting Agreement**”), your Continuous Service (as defined in the Plan) and vesting will not cease as of the Separation Date and will continue through the term of the Consulting Agreement.

Grant Number	Exercise Price per Share	Total Shares Subject to Option
G-2	\$ 1.17	165,000 (remaining after 85,000 shares were early exercised)
G-24	\$ 1.40	210,000
G-29	\$ 7.19	169,000

(b) **Restricted Stock.** You were granted a restricted stock award on April 15, 2019 for 90,000 shares. Under the terms of the restricted stock award, subject to your entry into the Consulting Agreement, your vesting will not cease as of the Separation Date and will continue through the term of the Consulting Agreement.

(c) **Additional Vesting.** As an additional severance benefit, if the Company terminates the Consulting Agreement for convenience prior to twelve (12) months from the effective date of the Consulting Agreement (the “**First Anniversary**”), the vesting of your options and restricted stock award will continue until the earlier of (i) the First Anniversary or (ii) the



occurrence of a Conflict. A “**Conflict**” shall be deemed to have arisen if you manage, operate, join, control or participate in the ownership, management, operation or control of, or is connected to as an employee, shareholder, director, manager, member, consultant, adviser, volunteer, partner or otherwise, whether for compensation or not, any entity that engages in the research, development, manufacturing, production, marketing or sale of cellular immunotherapies (i) utilizing natural killer cells, or (ii) a non-NK cell therapy being developed for lymphomas (including Hodgkin’s and non-Hodgkin’s lymphoma). For the avoidance of doubt, vesting of your options and restricted stock award will cease immediately if you terminate the Consulting Agreement for convenience or the Company terminates the Consulting Agreement for material breach, including due to a Conflict.

(d) **Option Repricing.** As an additional one-time severance benefit, in the event that the Company reprices option grants for current employees during the term of the Consulting Agreement, or, if later, by the First Anniversary (except in the event that you terminate the Consulting Agreement for convenience, or the Company terminates the Consulting Agreement for material breach, including due to a Conflict), all of your options for which repricing will reduce the exercise price will also be subject to such repricing, with no other changes to the option agreements.

(e) **Extended Exercise Period.** As an additional severance benefit, the exercise period for all of your vested options will be extended until the date that is three (3) years from the termination of the Consulting Agreement; provided that in the event a Conflict arises during the extended exercise period, the extended exercise period will end and you must exercise any vested options within ninety (90) days of the occurrence of the Conflict. You understand and agree that amending your option grants to provide for an extended exercise period may convert any options that were granted as “incentive stock options” under Section 422 of the Internal Revenue Code of 1986 (as amended) to no longer be “incentive stock options.” The loss of “incentive stock options” status has tax implications that you should discuss with your own tax and legal advisors. If you do not wish to extend the post-termination exercise window of the options, the options will retain “incentive stock options” status as long as you exercise the options within three (3) months following ceasing of vesting.

(f) **Carve-Out Plan.** The Company does not currently have in place a management or employee carve-out plan that reserves a portion of proceeds of a sale transaction of the Company (a “**Carve-Out Plan**”), or any plans to implement such a plan. However, in the event that the Company adopts a Carve-Out Plan and a transaction subject to the Carve-out Plan occurs during the term of the Consulting Agreement or, if later, by the First Year Anniversary, except in the event that you terminate the Consulting Agreement for convenience or the Company terminates the Consulting Agreement for material breach, including due to a Conflict, you will be eligible to participate in the Carve-Out Plan as if you were still an employee, taking into account such factors as the Board deems appropriate, which may include (though are not limited to), your ownership stake in the Company, and any contributions you may make to effectuating such a transaction.



5. **NO OTHER COMPENSATION OR BENEFITS.** You acknowledge that, except as expressly provided in this Agreement, you have not earned, and will not earn by the Separation Date, and will not receive from the Company any additional compensation (including base salary, bonus, incentive compensation, or equity, equity acceleration or vesting), severance, or benefits before or after the Separation Date, with the exception of any vested right you may have under the express terms of a written ERISA-qualified benefit plan (e.g., 401(k) account).

6. **EXPENSE REIMBURSEMENTS.** You agree that, within ten (10) calendar days after the Separation Date, you will submit your final documented expense reimbursement statement reflecting all business expenses you incurred through the Separation Date, if any, for which you seek reimbursement. The Company will reimburse you for these expenses pursuant to its regular business practice.

7. **RETURN OF COMPANY PROPERTY.** By no later than three (3) calendar days after the Separation Date, you will return to the Company all Company documents (and all copies thereof) and other Company property in your possession or control, including, but not limited to, Company files, notes, drawings, records, business plans and forecasts, contact information, financial information, specifications, training materials, computer-recorded information, tangible property including, but not limited to, computers, credit cards, entry cards, identification badges and keys; and any materials of any kind that contain or embody any proprietary or confidential information of the Company (and all reproductions thereof). You represent that you have made a diligent search to locate any such documents, property, and information within the required timeframe. In addition, if you have used any personally owned computer, server, e-mail system, mobile phone, portable electronic device (e.g., smartphone, iPad or the like), (collectively, “**Personal Systems**”) to receive, store, prepare or transmit any Company confidential or proprietary data, materials or information, then within three (3) calendar days after the Separation Date, you will permanently delete and expunge all such Company confidential or proprietary information from such Personal Systems without retaining any copy or reproduction in any form (in whole or in part). You agree that, after the applicable timeframes noted above, you will neither use nor possess Company property. Your timely compliance with this paragraph is a condition precedent to your receipt of the Severance Benefits described above.

8. **CONFIDENTIALITY.** The provisions of this Agreement will be held in strictest confidence by you and will not be publicized or disclosed by you in any manner whatsoever; provided, however, that: (a) you may disclose this Agreement in confidence to your immediate family and to your attorneys, accountants, tax preparers and financial advisors; (b) you may disclose this Agreement pursuant to a government investigation, if necessary to enforce its terms, or as otherwise required by law; and (c) you may make such statements and disclosures



as set forth in the section of this Agreement entitled “**Protected Rights**.” Notwithstanding any provision in this Agreement to the contrary, nothing herein shall prevent you from disclosing the fact or terms of this Agreement as part of any government investigation, or prohibit you from filing a charge, complaint, or report with, or otherwise communicating with, providing information to, or cooperating, or participating with any investigation or proceeding by or before the Equal Employment Opportunity Commission, the United States Department of Labor, the National Labor Relations Board, the Occupational Safety and Health Administration, the Securities and Exchange Commission, or any other federal, state or local government agency or commission. Nothing in this Agreement in any way prohibits or is intended to restrict you from discussing the terms and conditions of your employment with co-workers, exercising protected rights under Section 7 of the National Labor Relations Act (NLRA), exercising protected rights to the extent that such rights cannot be waived by agreement, or otherwise disclosing information as permitted by law.

9. **NO ADMISSIONS.** You understand and agree that the promises and payments in consideration of this Agreement shall not be construed to be an admission of any liability or obligation by the Company to you or to any other person, and that the Company makes no such admission.

10. **RELEASE OF CLAIMS.**

(a) **General Release.** In exchange for the consideration provided to you under this Agreement to which you would not otherwise be entitled, you hereby generally and completely release the Company, and its affiliated, related, and subsidiary entities, and its and their current and former directors, officers, employees, shareholders, partners, agents, attorneys, predecessors, successors, insurers, affiliates, and assigns (collectively, the “**Released Parties**”) from any and all claims, liabilities and obligations, both known and unknown, that arise out of or are in any way related to events, acts, conduct, or omissions occurring prior to or on the date you sign this Agreement (collectively, the “**Released Claims**”).

(b) **Scope of Release.** The Released Claims include, but are not limited to: (i) all claims arising out of or in any way related to your employment with the Company, or the termination of that employment; (ii) all claims related to your compensation or benefits from the Company, including salary, bonuses, commissions, vacation, expense reimbursements, severance pay, fringe benefits, stock, stock options, or any other ownership, equity, or profits interests in the Company; (iii) all claims for breach of contract, wrongful termination, and breach of the implied covenant of good faith and fair dealing; (iv) all tort claims, including claims for fraud, defamation, emotional distress, negligence, personal injury, conversion, and discharge in violation of public policy; (v) all federal, state, and local constitutional, statutory, or regulatory claims, including claims for discrimination, harassment, retaliation, attorneys’ fees, or other claims arising under the federal Civil Rights Act of 1964 (as amended), the federal Americans with Disabilities Act of 1990, the federal Age Discrimination in Employment Act of



1967 (as amended) (the “ADEA”), the California Labor Code (as amended), the California Family Rights Act (as amended), and the California Fair Employment and Housing Act (as amended); and all bases for recovering costs, fees, or other expenses incurred in these matters, including attorneys’ fees. You acknowledge that you have been advised, as required by California Government Code Section 12964.5(b)(4), that you have the right to consult an attorney regarding this Agreement and that you were given a reasonable time period of not less than five (5) business days in which to do so. You further acknowledge and agree that, in the event you sign this Agreement prior to the end of the reasonable time period provided by the Company, your decision to accept such shortening of time is knowing and voluntary and is not induced by the Company through fraud, misrepresentation, or a threat to withdraw or alter the offer prior to the expiration of the reasonable time period, or by providing different terms to employees who sign such an agreement prior to the expiration of the time period.

(c) **Excluded Claims.** Notwithstanding the foregoing, the following are not included in the Released Claims (the “**Excluded Claims**”):

(i) any rights or claims for indemnification you may have pursuant to any written indemnification agreement with the Company to which you are a party or under applicable law; (ii) any rights which are not waivable as a matter of law; and (iii) any claims for breach of this Agreement.

(d) **Protected Rights.** You understand that nothing in this Agreement prevents you from filing, cooperating with, or participating in any proceeding before the Equal Employment Opportunity Commission, the Department of Labor, the California Department of Fair Employment and Housing, or any other government agency, except that you acknowledge and agree that you hereby waive your right to any monetary benefits in connection with any such claim, charge or proceeding. Additionally, while this Agreement does not limit your right to receive an award for information provided to the Securities and Exchange Commission, you are otherwise waiving, to the fullest extent permitted by law, any and all rights you may have to individual relief based on any claims that you have released and any rights you have waived by signing this Agreement. Nothing in this Agreement prevents you from discussing or disclosing information about unlawful acts in the workplace, such as harassment or discrimination or any other conduct that you have reason to believe is unlawful.

(e) **ADEA Waiver.** You acknowledge that you are knowingly and voluntarily waiving and releasing any rights you may have under the ADEA, and that the consideration given for the waiver and release in this Section is in addition to anything of value to which you are already entitled. You further acknowledge that you have been advised, as required by the ADEA, that: (i) your waiver and release do not apply to any rights or claims that may arise after the date that you sign this Agreement; (ii) you should consult with an attorney prior to signing this Agreement (although you may choose voluntarily not to do so); (iii) you have twenty-one (21) days to consider this Agreement (although you may choose voluntarily to sign it earlier); (iv) you have seven (7) days following the date you sign this Agreement to revoke it (by providing written notice of your revocation to me); and (v) this Agreement will not be effective until the date upon which the revocation period has expired, which will be the eighth day after the date that this Agreement is signed by you provided that you do not revoke it (the “**Effective Date**”).

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11. **SECTION 1542 WAIVER.** In giving the release herein, which includes claims which may be unknown to you at present, you acknowledge that you have read and understand Section 1542 of the California Civil Code, which reads as follows:

“A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release and that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.”

You hereby expressly waive and relinquish all rights and benefits under that section and any law of any other jurisdiction of similar effect with respect to your release of claims herein, including but not limited to your release of unknown claims.

12. **REPRESENTATIONS.** You hereby represent that you have been paid all compensation owed and for all hours worked, have received all the leave and leave benefits and protections for which you are eligible pursuant to the Family and Medical Leave Act, the California Family Rights Act, or otherwise, and have not suffered any on-the-job injury and has no known occupational diseases for which you have not already filed a workers’ compensation claim.

13. **CONTINUING OBLIGATIONS; NON-DISPARAGEMENT.** You acknowledge and reaffirm your continuing obligations under your signed Employee Confidential Information and Invention Assignment Agreement, attached hereto as Exhibit B and which is incorporated herein by reference, and agree to abide by those continuing obligations. You also agree not to disparage the Company, its officers, directors, employees, shareholders, and agents, in any manner likely to be harmful to its or their business, business reputation, or personal reputation; provided that you may respond accurately and fully to any question, inquiry or request for information when required by legal process. In addition, nothing in this provision or this Agreement is intended to prohibit or restrain you in any manner from making disclosures protected under the whistleblower provisions of federal or state law or regulation, under Section 7 of the National Labor Relations Act’s protections of protected concerted activities, or other applicable law or regulation or as set forth in the section of this Agreement entitled **“Protected Rights.”**

14. **NO VOLUNTARY ADVERSE ACTION.** You agree that you will not voluntarily (except in response to legal compulsion or as permitted under the section of this Agreement entitled **“Protected Rights”**) assist any person in bringing or pursuing any proposed or pending litigation, arbitration, administrative claim or other formal proceeding against the Company, its parent or subsidiary entities, affiliates, officers, directors, employees, or agents.

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15. **COOPERATION.** You agree to cooperate fully with the Company in connection with its actual or contemplated defense, prosecution, or investigation of any claims or demands by or against third parties, or other matters arising from events, acts, or failures to act that occurred during the period of your employment by the Company. Such cooperation includes, without limitation, making yourself available to the Company upon reasonable notice, without subpoena, to provide complete, truthful, and accurate information in witness interviews, depositions, and trial testimony. The Company will reimburse you for reasonable out-of-pocket expenses you incur in connection with any such cooperation (excluding foregone wages) and will make reasonable efforts to accommodate your scheduling needs.

16. **DISPUTE RESOLUTION.** You and the Company agree that any and all disputes, claims, or controversies of any nature whatsoever arising from, or relating to, this Agreement or its interpretation, enforcement, breach, performance or execution, your employment, or the termination of such employment (including, but not limited to, any statutory claims) (collectively, “**Claims**”, each a “**Claim**”), shall be resolved, pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding, and confidential arbitration in San Diego, California (or another mutually acceptable location) conducted before a single neutral arbitrator by JAMS, Inc. (“**JAMS**”) or its successor, under the then applicable JAMS Arbitration Rules and Procedures for Employment Disputes (available at <http://www.jamsadr.com/rules-employment-arbitration/>). **By agreeing to this arbitration procedure, both you and the Company waive the right to have any Claim resolved through a trial by jury or judge or an administrative proceeding.** You will have the right to be represented by legal counsel at any arbitration proceeding, at your own expense. This paragraph shall not apply to any action or claim that cannot be subject to mandatory arbitration as a matter of law, including, without limitation, claims brought pursuant to the California Private Attorneys General Act of 2004, as amended, to the extent such claims are not permitted by applicable law to be submitted to mandatory arbitration and the applicable law(s) are not preempted by the Federal Arbitration Act or otherwise invalid (collectively, the “**Excluded Claims**”). In the event you intend to bring multiple claims, including one of the Excluded Claims listed above, the Excluded Claims may be publicly filed with a court, while any other claims will remain subject to mandatory arbitration. The arbitrator shall have sole authority for determining if a Claim is subject to arbitration, and any other procedural questions related to the dispute and bearing on the final disposition. In addition, the arbitrator shall: (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be available under applicable law in a court proceeding; and (b) issue a written statement signed by the arbitrator regarding the disposition of each claim and the relief, if any, awarded as to each claim, the reasons for the award, and the arbitrator’s essential findings and conclusions on which the award is based. The Company shall pay all JAMS arbitration fees. Nothing in this Agreement shall prevent you or the Company from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.



17. **MISCELLANEOUS.** This Agreement, including the Exhibits, constitutes the complete, final, and exclusive embodiment of the entire agreement between you and the Company with regard to its subject matter. It is entered into without reliance on any promise or representation, written or oral, other than those expressly contained herein, and it supersedes any other such promises, warranties, or representations. This Agreement may not be modified or amended except in a writing signed by both you and a duly authorized officer of the Company. This Agreement will bind the heirs, personal representatives, successors and assigns of both you and the Company, and inure to the benefit of both you and the Company, their heirs, successors, and assigns. The Company may freely assign this Agreement without your prior written consent. You may not assign any of your duties hereunder and you may not assign any of your rights hereunder without the written consent of the Company. If any provision of this Agreement is determined to be invalid or unenforceable, in whole or in part, this determination will not affect any other provision of this Agreement and the provision in question will be modified so as to be rendered enforceable. This Agreement will be deemed to have been entered into and will be construed and enforced in accordance with the laws of the State of California without regard to conflict of laws principles. Any ambiguity in this Agreement shall not be construed against either party as the drafter. Any waiver of a breach of this Agreement shall be in writing and shall not be deemed to be a waiver of any successive breach. This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures were upon the same instrument. Signatures on this Agreement communicated by facsimile or other similar electronic transmission or a digital signature provided through DocuSign®, Adobe Sign (or some other similar service) shall be considered an original signature, and the use of electronic signatures and the keeping of records in electronic form be granted the same legal effect, validity, or enforceability as a signature affixed by hand or the use of a paper-based record keeping system to the extent and as provided for in any applicable law including the Federal Electronic Signatures in Global and National Commerce Act, California digital signature regulations, or any other similar state laws based on the Uniform Electronic Transactions Act.

[Signature page follows]

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If this Agreement is acceptable to you, please sign below and return to . You have twenty-one (21) calendar days to decide whether you would like to accept this Agreement, and the Company's offer contained herein will automatically expire if you do not sign and return it within this timeframe.

We wish you the best in your future endeavors.

Sincerely,

ARTIVA BIOTHERAPEUTICS, INC.

/s/ Fred Aslan

Signature

3/31/2023

Date

Fred Aslan, MD

Name

Chief Executive Officer

Title

EXHIBIT A – Consulting Agreement

EXHIBIT B – Employee Confidential Information and Invention Assignment Agreement

I HAVE READ, UNDERSTAND, AND AGREE FULLY TO THE FOREGOING AGREEMENT:

/s/ Peter Flynn

Signature

3/31/2023

Date

Peter Flynn

Name

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Exhibit A
CONSULTING AGREEMENT

Artiva Biotherapeutics, Inc. | 5505 Morehouse Drive, Suite 200, San Diego CA 92121



Exhibit B

EMPLOYEE CONFIDENTIAL INFORMATION AND INVENTION ASSIGNMENT

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CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the “**Agreement**”) is made by and between **ARTIVA BIOTHERAPEUTICS, INC.** (“**Company**”) and **PETER FLYNN, PhD**, an individual (“**Consultant**”), effective as of **MARCH 31, 2023** (the “**Effective Date**”).

Company desires to benefit from Consultant’s expertise and experience by retaining Consultant as a consultant, and Consultant wishes to perform consulting services for Company, as provided for below. Accordingly, Company and Consultant agree as follows:

- 1. ENGAGEMENT OF SERVICES.** Subject to the terms of this Agreement, Consultant agrees to provide consulting services to Company as described in **EXHIBIT A** hereto (collectively, the “**Services**”) during the term of this Agreement. Consultant agrees to exercise diligence and the highest degree of professionalism in providing Services under this Agreement. Company will make its facilities and equipment available to Consultant when necessary. Consultant may not subcontract or otherwise delegate his obligations under this Agreement without Company’s prior written consent. Consultant shall perform all Services in compliance with all applicable laws.
- 2. COMPENSATION.** As sole compensation for the performance of the Services, Company will pay to Consultant the amounts and on the schedule specified in **EXHIBIT A**. Consultant will be reimbursed for expenses as specified in **EXHIBIT A**.
- 3. INDEPENDENT CONTRACTOR RELATIONSHIP.** Consultant’s relationship with Company is that of an independent contractor, and nothing in this Agreement is intended to, or should be construed to, create a partnership, agency, joint venture or employment relationship with Company and Consultant. Consultant is not entitled to and will be excluded from participating in any of Company’s fringe benefit plans or programs as a result of the performance of the Services, including, but not limited to, health, sickness, accident or dental coverage, life insurance, disability benefits, accidental death and dismemberment coverage, unemployment insurance coverage, workers’ compensation coverage, and pension or 401(k) benefit(s) provided by Company to its employees (and Consultant waives the right to receive any such benefits). Consultant agrees, as an independent contractor, that he is not entitled to unemployment benefits in the event this Agreement terminates, or workers’ compensation benefits in the event that he is injured in any manner or becomes ill while performing the Services under this Agreement. Consultant is solely responsible for all tax returns, payments, or reports required to be filed with or made to any federal, state or local tax authority with respect to Consultant’s performance of Services and receipt of fees under this Agreement. Consultant has discretion to set its own hours, and Consultant will use its own computers, software, and other IT equipment. Consultant is not authorized to make any representation, contract or commitment on behalf of Company, unless specifically requested or authorized to do so by an executive officer of Company. No part of Consultant’s compensation will be subject to withholding by Company for the payment of any social security, federal, state or any other employee payroll taxes. Company will regularly report any amounts paid to Consultant by filing Form 1099-MISC with the Internal Revenue Service as required by law. Consultant hereby agrees to indemnify and defend Company against any and all income and employment taxes or contributions owed as a result of any fees and payments made to Consultant hereunder, including penalties and interest.

4. TRADE SECRETS; INTELLECTUAL PROPERTY RIGHTS.

4.1 Confidential Information. Consultant agrees during the term of this Agreement and thereafter that he will take all steps necessary to hold Company's Confidential Information in trust and confidence, will not use Confidential Information in any manner or for any purpose not expressly set forth in this Agreement, and will not disclose any such Confidential Information to any third party without first obtaining Company's express written consent on a case-by-case basis. "**Confidential Information**" includes, but is not limited to, all information related to Company's business and its actual or anticipated research and development, including without limitation (a) trade secrets, inventions, ideas, processes, computer source and object code, formulae, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products or plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, clients and customers; (c) information regarding the skills and compensation of Company's employees, contractors, and any other service providers of Company; and (d) the existence of any business discussions, negotiations, or agreements between Company and any third party. In addition, "**Company Work Product**" (defined below) shall constitute Confidential Information. Notwithstanding the other provisions of this Agreement, nothing received by Consultant will be considered to be Confidential Information if Consultant can demonstrate by clear and convincing evidence that: (i) it has been published or is otherwise readily available to the public other than by a breach of this Agreement; (ii) it has been rightfully received by Consultant from a third party without confidential limitations; (iii) it has been independently developed for Consultant by personnel or agents having no access to Company Confidential Information, as evidenced by Consultant's written records; or (iv) it was known to Consultant prior to its first receipt from Company, except in the case of Company Work Product, which shall not be subject to the exception in this Section 4.1. Further, notwithstanding the other provisions of this Agreement, pursuant to 18 U.S.C. Section 1833(b), Consultant shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and solely for the purpose of reporting or investigating a suspected violation of law; or is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

4.2 Third Party Information. Consultant understands that Company has received and will in the future receive from third parties confidential or proprietary information ("**Third Party Information**") subject to a duty on Company's part to maintain the confidentiality of such information and use it only for certain limited purposes. Consultant agrees to hold Third Party Information in confidence and not to disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or to use, except in connection with Consultant's work for Company, Third Party Information unless expressly authorized in writing by an executive officer of Company.

4.3 No Conflict of Interest. Consultant agrees during the term of this Agreement not to accept work or enter into a contract or accept an obligation inconsistent or incompatible with Consultant's obligations under this Agreement or the scope of services rendered for Company. Consultant warrants that to the best of his knowledge, there is no other existing contract or duty on Consultant's part inconsistent with this Agreement. Consultant further agrees not to disclose

to Company, or bring onto Company's premises, or induce Company to use any confidential information that belongs to anyone other than Company or Consultant. In addition, Consultant agrees that, during the term of this Agreement, Consultant will not perform, or agree to perform, any services for any third party that engages in the Company's Business (as defined in section 6.5 below).

4.4 Disclosure of Work Product. As used in this Agreement, the term "**Work Product**" means any trade secrets, ideas, inventions (whether patentable or unpatentable), mask works, processes, procedures, formulations, formulas, software source and object codes, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs and techniques, trademarks, manufacturing techniques, or other copyrightable or patentable works. Consultant agrees to disclose promptly in writing to Company, or any person designated by Company, all Work Product that is solely or jointly conceived, made, reduced to practice, or learned by Consultant in the course of any work or Services performed for Company ("**Company Work Product**").

4.5 Assignment of Company Work Product. Consultant irrevocably assigns to Company all right, title, and interest worldwide in and to Company Work Product and all applicable intellectual property rights related to Company Work Product, including without limitation, copyrights, trademarks, trade secrets, patents, moral rights, contract, and licensing rights (the "**Proprietary Rights**"). Consultant retains no rights to use Company Work Product and agrees not to challenge the validity of Company's ownership in Company Work Product.

4.6 Waiver of Assignment of Other Rights. If Consultant has any rights to Company Work Product that cannot be assigned to Company, Consultant unconditionally and irrevocably waives the enforcement of such rights and all claims and causes of action of any kind against Company with respect to such rights. Consultant agrees, at Company's request and expense, to consent to and join in any action to enforce such rights. If Consultant has any right to Company Work Product that cannot be assigned to Company or waived by Consultant, Consultant unconditionally and irrevocably grants to Company during the term of such rights, an exclusive, irrevocable, perpetual, worldwide, fully paid and royalty-free license, with rights to sublicense through multiple levels of sublicensees, to reproduce, create derivative works of, distribute, publicly perform and publicly display by all means now known or later developed, such rights.

4.7 Assistance. Consultant agrees to cooperate with Company or its designee(s), both during and after the term of this Agreement, in the procurement and maintenance of Company's rights in Company Work Product, and to execute, when requested, any other documents deemed necessary by Company to carry out the purpose of this Agreement.

4.8 Enforcement of Proprietary Rights. Consultant will assist Company in every proper way to obtain, and from time to time enforce, United States and foreign Proprietary Rights relating to Company Work Product in any and all countries. To that end Consultant will execute, verify, and deliver such documents and perform such other acts (including appearances as a witness) as Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining, and enforcing such Proprietary Rights and the assignment thereof. In addition, Consultant will execute, verify, and deliver assignments of such Proprietary Rights to

Company or its designee. Consultant's obligation to assist Company with respect to Proprietary Rights relating to such Company Work Product in any and all countries shall continue beyond the termination of this Agreement, but Company shall compensate Consultant at a reasonable rate after such termination for the time actually spent by Consultant at Company's request on such assistance.

4.9 Execution of Documents. In the event Company is unable for any reason, after reasonable effort, to secure Consultant's signature on any document needed in connection with the actions specified in the preceding Sections 4.7 and 4.8, Consultant hereby irrevocably designates and appoints Company and its duly authorized officers and agents as Consultant's agent and attorney in fact, which appointment is coupled with an interest, to act for and in its behalf to execute, verify, and file any such documents and to do all other lawfully permitted acts to further the purposes of the preceding paragraph with the same legal force and effect as if executed by Consultant. Consultant hereby waives and quitclaims to Company any and all claims, of any nature whatsoever, which Consultant now or may hereafter have for infringement of any Proprietary Rights assigned hereunder to Company.

5. CONSULTANT REPRESENTATIONS AND WARRANTIES.

5.1 Representations. Consultant hereby represents and warrants that (a) Company Work Product will be an original work of Consultant; (b) neither Company Work Product nor any element thereof will be subject to any restrictions or to any mortgages, liens, pledges, security interests, encumbrances, or encroachments; (c) Consultant will not grant, directly or indirectly, any rights or interest whatsoever in Company Work Product to third parties; and (d) Consultant has full right and power to enter into and perform this Agreement without the consent of any third party.

5.2 Debarment. Consultant warrants that he is not and has not previously been (a) debarred under 21 U.S.C. § 335(a) or other law; (b) debarred or excluded under 42 U.S.C. § 1320a-7 or other law from participation in the Medicare program, any state Medicaid program or any other federal health care program, (c) disqualified as described in 21 C.F.R. § 812.119, (d) charged with, indicted for or convicted of a criminal offense that would lead to debarment under 21 U.S.C. 335a or other law, or exclusion from participation in the Medicare program, any state Medicaid program or any other federal health care program; or (d) to Consultant's actual knowledge, under investigation by any government body for debarment, disqualification or exclusion action. Consultant further warrants and covenants it has not, and shall not, knowingly employ, contract with, or retain any person or entity directly or indirectly to perform Services under this Agreement if such a person or entity is or has been (i) debarred under 21 U.S.C. § 335(a) or other law; (ii) debarred or excluded under 42 U.S.C. § 1320a-7 or other law from participation in the Medicare program, any state Medicaid program or any other federal health care program, (iii) disqualified as described in 21 C.F.R. § 812.119, (iv) charged with, indicted for or convicted of a criminal offense that would lead to debarment under 21 U.S.C. 335a or other law, or exclusion from participation in the Medicare program, any state Medicaid program or any other federal health care program; or (v) to Consultant's actual knowledge, under investigation by any government body for debarment, disqualification or exclusion action. In the event that Consultant becomes aware of or receives notice of any debarment, exclusion, disqualification or investigation described above of Consultant or any person or entity directly or indirectly involved in the performance of the Services, Consultant shall notify Company in writing.

6. TERM AND TERMINATION.

6.1 Term. Subject to Sections 6.1 and 6.2 below, the term of this Agreement will begin as of the Effective Date and will continue unless terminated by either party in accordance with this Section 6.

6.2 Termination by Company. Company may terminate this Agreement at its convenience and without any breach by Consultant upon 30 days' prior written notice to Consultant. Company may also terminate this Agreement immediately in its sole discretion upon Consultant's material breach of Sections 4, 6.4, 6.5 and/or 6.6.

6.3 Termination by Consultant. Consultant may terminate this Agreement at any time upon 30 days' prior written notice to Company.

6.4 Noninterference. During the term of this Agreement and for a period of one year immediately following termination of this Agreement by either party, Consultant agrees not to solicit or induce (or attempt to solicit or induce) any employee, consultant, agent, or independent contractor to terminate or breach an employment, contractual, or other relationship with Company.

6.5 Noncompetition. In order to protect Company's Confidential Information, Consultant agrees that during the term of this Agreement, Consultant shall not manage, operate, join, control or participate in the ownership, management, operation or control of, or is connected to as an employee, shareholder, director, manager, member, consultant, adviser, volunteer, partner or otherwise, whether for compensation or not, any entity that engages in Company's Business (as defined below). This provision does not require Consultant to liquidate any investments he may have as of the Effective Date, and does not prohibit Consultant (x) from being a passive investor of not more than 2% of the outstanding stock of any class of a corporation which is publicly traded, so long as Consultant has no active participation in the business of such corporation; or (y) from joining a separate division of an entity or business, even if another division of such entity or business engages in Company's Business, provided that Consultant does not (i) perform any services for such other division, or (ii) provide any formal or informal advice or guidance to such other division. "**Company's Business**" means the research, development, manufacturing, production, marketing or sale of cellular immunotherapies (i) utilizing natural killer cells, or (ii) a non-NK cell therapy being developed for lymphomas (including Hodgkin's and non-Hodgkin's lymphoma).

6.6 Return of Company Property. Unless otherwise authorized by Company, upon termination of the Agreement or earlier as requested by Company, Consultant will deliver to Company any and all drawings, notes, memoranda, specifications, devices, formulas, and documents, together with all copies thereof, and any other material containing or disclosing any Company Work Product, Third Party Information, or Proprietary Information of Company. Consultant further agrees that any property situated on Company's premises and owned by Company, including all forms of storage media, filing cabinets or other work areas, is subject to inspection by Company personnel at any time with or without notice.

6.7 Survival. The following provisions shall survive termination of this Agreement: Section 4, Section 5, Section 6.4, Section 6.5, Section 6.6, Section 7 and Section 8.

7. INDEMNIFICATION. Consultant will indemnify, defend and hold Company harmless from and against any and all losses, claims, and expenses (including reasonable attorneys' fees) directly or indirectly arising out of, or resulting from, (a) Consultant's commission of any act or omission related to the Services he performs; (b) Consultant's unauthorized use of any Confidential Information; or, (c) Consultant's material breach of any representation, warranty, or covenant contained in this Agreement, or otherwise made to the Company.

8. GENERAL PROVISIONS.

8.1 Governing Law. This Agreement shall be governed and construed in accordance with the laws of the State of California and all claims relating to or arising out of this Agreement, or the breach thereof, whether sounding in contract, tort or otherwise, shall likewise be governed by the laws of the state of California. The parties consent to and agree that service of any summons and complaint or other process in any such action or proceeding may be made by registered or certified mail in addition to personal service, or any other form of service contemplated by the laws of the state of California.

8.2 Severability. In case any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect the other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein. If moreover, any one or more of the provisions contained in this Agreement shall for any reason be held to be excessively broad as to duration, geographical scope, activity, or subject, it shall be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it shall then appear.

8.3 No Assignment. This Agreement may not be assigned by Consultant without Company's consent, and any such attempted assignment shall be void and of no effect.

8.4 Notices. All notices, requests, and other communications under this Agreement must be in writing and must be mailed by registered or certified mail, postage prepaid and return receipt requested, electronic mail, or delivered by hand to the party to whom such notice is required or permitted to be given. If mailed, any such notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If emailed, any such notice will be considered to have been given upon acknowledgment of receipt of electronic transmission. If delivered by hand, any such notice will be considered to have been given when received by the party to whom notice is given, as evidenced by written and dated receipt of the receiving party. The address for notice to either party will be the address shown on the signature page of this Agreement. Either party may change its address by notice as provided by this section.

8.5 Legal Fees. If any dispute arises between the parties with respect to the matters covered by this Agreement which leads to a proceeding to resolve such dispute, the prevailing party in such proceeding shall be entitled to receive its reasonable attorneys' fees, expert witness fees, and out-of-pocket costs incurred in connection with such proceeding, in addition to any other relief it may be awarded.

8.6 Injunctive Relief. A breach of any of the promises or agreements contained in this Agreement may result in irreparable and continuing damage to Company for which there may be no adequate remedy at law, and Company is therefore entitled to seek injunctive relief as well as such other and further relief as may be appropriate.

8.7 Waiver. No waiver by Company of any breach of this Agreement shall be a waiver of any preceding or succeeding breach. No waiver by Company of any right under this Agreement shall be construed as a waiver of any other right. Company shall not be required to give notice to enforce strict adherence to all terms of this Agreement.

8.8 Entire Agreement. This Agreement is the final, complete, and exclusive agreement of the parties with respect to the subject matter hereof. This Agreement supersedes all prior discussions between the parties. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by Consultant and an executive officer of Company. The terms of this Agreement will govern all Services undertaken by Consultant for Company.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have caused this Consulting Agreement to be executed by their duly authorized representative.

COMPANY:

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan
Name: Fred Aslan
Title: Chief Executive Officer

Address: Artiva Biotherapeutics
5505 Morehouse Drive
Suite 100
San Diego, CA 92121
USA

Email: Legal@artivabio.com

CONSULTANT:

PETER FLYNN, PHD

/s/ Peter Flynn
(Signature)

Address:

EXHIBIT A

SERVICES

1.

Amendment No. 1 to Consulting Agreement

This Amendment No. 1 (the “**Amendment**”), effective as of September 1, 2023, amends certain provisions of the Consulting Agreement dated March 31, 2023 (the “**Agreement**”), between Artiva Biotherapeutics, Inc. (“**Company**”), having its principal place of business at 5505 Morehouse Drive, Suite 100, San Diego, CA 92121 and Peter Flynn (“**Consultant**”).

WHEREAS, Company and Consultant find it in their respective interests to amend the provisions of the Agreement.

NOW THEREFORE, pursuant to such provision and for consideration duly given, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree to the following:

1. Except as expressly amended hereby, the Agreement shall continue to remain in full force and effect in accordance with its terms.
2. Section 6.5 of the Agreement is hereby deleted in its entirety and replaced with the following:

“6.5 Noncompetition. In order to protect Company’s Confidential Information, Consultant agrees that during the term of this Agreement, Consultant shall not manage, operate, join, control or participate in the ownership, management, operation or control of, or is connected to as an employee, shareholder, director, manager, member, consultant, adviser, volunteer, partner or otherwise, whether for compensation or not, any entity that engages in Company’s Business (as defined below); provided that, notwithstanding the foregoing, Consultant may provide consulting services to GC Cell Corporation and its Affiliates that (i) is not related to any technology licensed by Artiva from GC Cell Corporation or (ii) if related to any technology licensed by Artiva from GC Cell Corporation, is not adverse in interest to Company (including adversely in any negotiations between Artiva and GC Cell Corporation), as approved in advance by Company in writing, in each case of (i) and (ii) as long as Consultant continues to be in compliance of Section 4 hereof in the provision of such services. This provision does not require Consultant to liquidate any investments he may have as of the Effective Date, and does not prohibit Consultant (x) from being a passive investor of not more than 2% of the outstanding stock of any class of a corporation which is publicly traded, so long as Consultant has no active participation in the business of such corporation; or (y) from joining a separate division of an entity or business, even if another division of such entity or business engages in Company’s Business, provided that Consultant does not (i) perform any services for such other division, or (ii) provide any formal or informal advice or guidance to such other division. **“Company’s Business”** means the research, development, manufacturing, production, marketing or sale of cellular immunotherapies (i) utilizing natural killer cells, or (ii) a non-NK cytotoxic cell therapy being developed for lymphomas (including Hodgkin’s and non-Hodgkin’s lymphoma) or autoimmunity indications.”

Amendment No. 1 – Consulting Agreement (Peter Flynn)

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3. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which shall constitute together the same document. The Parties agree that signatures transmitted by electronic means (e.g. facsimile or a scanned version of the executed agreement in PDF format attached to an e-mail) shall bind the Parties. This Amendment is otherwise governed by the terms and conditions of the Original Agreement, except as amended hereby.

[Signature Page Follows]

Amendment No. 1 – Consulting Agreement (Peter Flynn)

IN WITNESS WHEREOF, each of the undersigned parties have had this Amendment executed by its duly authorized representatives.

ARTIVA BIOTHERAPEUTICS, INC.

PETER FLYNN

By: /s/ Jennifer Bush

/s/ Peter Flynn
Peter Flynn

Printed Name: Jennifer Bush

Title: EVP, Chief Legal & People Officer

Email: legal@artivabio.com

Amendment No. 1 – Consulting Agreement (Peter Flynn)



April 15, 2024

Neha Krishnamohan

Private & Confidential

Re: Employment Offer Letter

Dear Neha,

On behalf of Artiva Biotherapeutics, Inc. (the “**Company**”), I am pleased to offer you employment under the terms set forth in this offer letter agreement (this “**Agreement**”). These employment terms will be effective as of your start date, which will be on April 22, 2024 (the “**Start Date**”). This offer is contingent upon approval by the Company’s Board of Directors (the “**Board**”), and your successful completion of a background check to the satisfaction of the Company.

1. Employment Position; Duties. You will be employed as the Company’s Chief Financial Officer and Executive Vice President of Corporate Development (“**CFO**”). As CFO, you will have those duties and responsibilities as are customary for this position and as may be directed by the Company. The offer letter does not preclude you from serving on the board of directors of Arcutis Biotherapeutics, Inc. (NASDAQ: ARQT), or performing consulting services to XOMA Corporation (NASDAQ: XOMA) through April 30, 2024.

2. Base Salary; Employee Benefits and Business Expenses.

(a) Base Salary. Your initial base salary will be paid at the annual rate of \$480,000, less standard payroll deductions and tax withholdings. You will be paid Your base salary will be paid on the Company’s normal payroll schedule. As an exempt salaried employee, you will be required to work the Company’s normal business hours, and such additional time as appropriate for your work assignments and position. You will not be eligible for extra payment under the overtime laws. You may be eligible to receive a salary increase after completion of the 2024 performance year.

(b) Employee Benefits. Effective the first day of the month following your Start Date, you will be eligible to participate in the Company’s benefit program. The current benefit program includes medical, dental and vision coverage. You may also elect to participate in the Company’s 401K plan. The Company does not contribute currently to the 401K plan. You will also be eligible to accrue Paid Time Off (PTO) at a rate of 9 hours per pay period (216 hours annually). Details of the PTO policy and other benefits are provided in the Company’s Employee Handbook.

(c) Business Expenses. Your legitimate and documented business expenses will be reimbursed by the Company as provided under its business expense reimbursement policies.

3. Annual Bonus. In addition to base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of forty percent (40%) of your base salary in effect during the bonus year. Your bonus for fiscal 2024 will be pro-rated based on your Start Date. With respect to the annual incentive compensation program, the Company’s executive team will evaluate and recommend specific annual corporate and/or individual performance targets, metrics and/or management-by-objectives (“**MBOs**”), to be finalized and approved by the Company’s Board of Directors (the “**Board**”), as part of its annual compensation review process. Annual bonuses are paid

on an annual basis, after the close of the fiscal year and after determination by the Board of (a) the level of achievement of the applicable individual and corporate performance targets, metrics and/or MBOs, and (b) the amount of the annual incentive compensation earned by you (if any). No amount of annual incentive compensation is guaranteed and, in addition to the other conditions for earning such compensation, you must remain an employee of the Company in good standing on the scheduled annual incentive compensation payment date in order to earn or be eligible for any annual incentive compensation. Except as expressly provided in this Agreement or communicated to you in writing by a duly authorized officer of the Company, you will not be entitled to any other incentive compensation, commission, or other bonus programs.

4. Equity Award. Upon joining the Company, and subject to approval by the Company's Board of Directors, you will be eligible to receive a stock option grant to purchase 450,000 shares of the Company's common stock (the "**Options**"), pursuant to the Company's 2020 Equity Incentive Plan (the "**Plan**"), which reflect 1.175% of the Company's full diluted outstanding shares. The purchase price per share of the Options will be equal to the fair market value of the Company's common stock on the date of grant. Twenty-five percent (25%) of the Options will vest on the one-year anniversary of your Start Date and the remainder will vest in equal monthly installments thereafter over the next thirty-six (36) months, subject to your Continued Service (as defined in the Plan) with the Company through each such vesting date. The terms of the Options will be governed by the Plan and the applicable option award agreement between you and the Company.

5. Compliance with Confidentiality Agreement and Company Policies. As a condition of employment, you shall sign and comply with the Company's standard form of Employee Confidential Information and Invention Assignment Agreement (the "**Confidentiality Agreement**"). The Confidentiality Agreement shall be deemed fully incorporated into this Agreement by reference.

6. Protection of Third-Party Information and Outside Activities.

(a) Third Party Information. In your work for the Company, you will be expected not to make any unauthorized use or disclosure of any confidential information or materials, including trade secrets, of any former employer or other third party; and not to violate any lawful agreement that you may have with any third party. By signing this Agreement, you represent that you are able to perform your job duties within these guidelines, and you are not in unauthorized possession or control of any confidential documents, information, or other property of any former employer. In addition, you represent that you have disclosed to the Company in writing any agreement you may have with any third party (*e.g.*, a former employer) that may limit your ability to perform your duties to the Company or that could present a conflict of interest with the Company, including but not limited to disclosure (and a copy) of any contractual restrictions on solicitations or competitive activities.

(b) Outside Activities. During your employment by the Company, you may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of your duties hereunder or present a conflict of interest with the Company or its affiliates. Subject to the restrictions set forth herein, and only with prior written disclosure to and written consent of the Board, you may engage in other types of business or public activities. The Board may withdraw such consent, if the Board determines, in its sole discretion, that such activities compromise or threaten to compromise the business interests of the Company or its affiliates or conflict with your duties to the Company.

7. At-Will Employment Relationship. Your employment relationship with the Company is employment at-will. Accordingly, you may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company; and the Company may terminate your employment at any time with or without Cause (as defined below) or prior notice. In addition, the Company retains the discretion to modify your other employment terms from time to time, including but not limited to your position, duties, reporting relationship, work location, compensation (including base salary and incentive compensation terms), and benefits.

8. Severance.

(a) Pre-IPO Severance for Qualifying Termination. If (i) your employment is terminated by the Company without Cause or you terminate your employment for Good Reason (as defined in the Plan, or any successor or replacement plan), other than due to your death or disability, and (ii) you satisfy the Release Requirement (defined below), then you will receive severance pay in the form of continuation of your final monthly base salary for six (6) months, plus six (6) months of benefits coverage under COBRA, less standard payroll deductions and tax withholdings. All equity awards awarded to you are subject to “double trigger” acceleration such that, in the event of a Change of Control (as defined in the Plan) within the period commencing three (3) months prior to, and ending twelve (12) months after, the effective time of such Change in Control, and your employment is terminated without Cause or due to your voluntary termination with Good Reason, then subject to your execution and non-revocation of a general release in a form acceptable to the Company or its successor, as of the date of termination of your continuous service, the vesting of any remaining Options shall be accelerated in full.

(b) Post-IPO Severance upon Termination without Cause or Resignation with Good Reason. If (i) your employment is terminated by the Company without Cause (as defined in the Plan), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following “**Severance Benefits**”: (A) You will receive severance pay in the form of continuation of your final monthly base salary for a period of nine (9) months following your termination date, less standard payroll deductions and tax withholdings (the “**Severance Payments**”). Subject to Section 10(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; (B) In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending nine (9) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the “**COBRA Payment Period**”). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the “**Health Care Benefit Payment**”). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; and (C) The vesting and exercisability of all outstanding and unvested equity awards covering the Company’s common stock that are held by you as of immediately prior to the termination date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in accordance with their applicable vesting schedules as if you had completed an additional three (3) months of service with the Company as of the termination date.

(c) Post-IPO Severance upon Termination without Cause or Resignation with Good Reason in Connection with a Change of

Control. If (i) your employment is terminated by the Company without Cause (as defined in the Plan), other than due to your death or disability, or you terminate your employment with Good Reason (as defined in the Plan), in each case within a period commencing three (3) months before, or twelve (12) months after a Change of Control (as defined in the Plan), (ii) you satisfy the Release Requirement (defined below), and (iii) comply with your obligations under the Confidentiality Agreement, then you will receive the following **“Change of Control Severance Benefits”**: (A) You will receive severance pay in the form of continuation of your final monthly base salary for a period of twelve (12) months following your termination date, less standard payroll deductions and tax withholdings (the **“Change of Control Severance Payments”**). Subject to Section 10(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date; (B) In addition, if you timely elect continued coverage under COBRA, the Company will pay the COBRA premiums for you and your eligible dependents until the earlier of either: (i) a period ending twelve (12) months following your termination date or, (ii) the date on which you are no longer eligible for COBRA coverage (such period, the **“COBRA Payment Period”**). Notwithstanding the foregoing, if the Company determines, in its sole discretion, that the Company cannot provide the COBRA premium benefits without potentially incurring financial costs or penalties under applicable law (including, without limitation, Section 2716 of the Public Health Service Act), the Company shall in lieu thereof pay you a taxable cash amount, which payment shall be made regardless of whether you or your qualifying family members elect COBRA continuation coverage (the **“Health Care Benefit Payment”**). The Health Care Benefit Payment shall be paid in installments on the same schedule that the COBRA premiums would otherwise have been paid to the insurer. The Health Care Benefit Payment shall be equal to the amount that the Company otherwise would have paid for COBRA insurance premiums (which amount shall be calculated based on the premium for the first month of coverage), and shall be paid until the expiration of the COBRA Payment Period. For purposes of this Agreement, (i) references to COBRA shall be deemed to refer also to analogous provisions of state law and (ii) any applicable insurance premiums that are paid by the Company shall not include any amounts payable by you under an Internal Revenue Code Section 125 health care reimbursement plan, which amounts, if any, are your sole responsibility; (C) In addition, you will receive your full target Annual Bonus for the fiscal year in which your employment terminates, payable on the first regular payroll date following the Release Effective Date, provided that the Release Requirement has been satisfied; and (D) Effective as of the later of the termination date or the effective date of the Change of Control, the vesting and exercisability of all outstanding and unvested equity awards covering the Company’s common stock that are held by you as of immediately prior to such date, to the extent such equity awards would otherwise have vested solely conditioned on your continued services with the Company, shall accelerate vesting in full. For the avoidance of doubt, in no event shall you be entitled to benefits under both Section 10(b) and this Section 10(c). If you are eligible for benefits under both Section 10(b) and this Section 10(c), you shall receive the benefits set forth in this Section 10(c) and such benefits shall be reduced by any benefits previously provided to you under Section 10(b).

(d) Release Requirement. To be eligible for the Severance Benefits pursuant to Section 10(a)-(b) and the Change of Control Severance Benefits pursuant to Section 10(c) above, you must satisfy the following release requirement (the “**Release Requirement**”): You must timely execute and return to the Company a signed and dated general release of all known and unknown claims in a separation agreement acceptable to the Company (the “**Release and Waiver**”) within the applicable deadline set forth therein, but in no event later than forty-five (45) calendar days following your termination date, and permit the Release and Waiver to become effective and irrevocable in accordance with its terms (such effective date of the Release and Waiver, the “**Release Effective Date**”). No Severance Benefits or Change of Control Severance Benefits will be paid or provided hereunder prior to such Release Effective Date. You may be required by the separation agreement to provide reasonable transitional services as a condition to receiving the Severance Benefits and/or the Change of Control Severance Benefits.

(e) Other. You will not be eligible for any Severance Benefits or Change of Control Severance Benefits under any circumstances other than those described herein, including circumstances in which your employment is terminated for Cause, you terminate your employment for any reason other than Good Reason, or your employment terminates due to your death or disability. In addition, if you materially breach any continuing obligations to the Company (including, but not limited to, any material breach of this Agreement or any material breach of the Confidentiality Agreement) during the period of time that you are receiving any Severance Benefits or Change of Control Severance Benefits, as applicable, you will forfeit your entitlement to any then unpaid Severance Benefits and/or Change of Control Severance Benefits, as applicable, and the Company’s obligation to continue to pay or provide such Severance Benefits and Change of Control Severance Benefits will immediately terminate as of the date of your material breach and you will be required to return to the Company any Severance Benefits and Change of Control Severance Benefits already provided to you.

(f) IRS Code Section 409A. All payments provided hereunder are intended to constitute separate payments for purposes of Treasury Regulation Section 1.409A-2(b)(2). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A of the Internal Revenue Code of 1986 as amended (“**Section 409A**”), such benefits will not commence in connection with your termination of employment unless such termination also qualifies as a “separation from service” with the Company within the meaning of Treasury Regulation Section 1.409A-1(h) (without regard to any permissible alternative definition thereunder) (“**Separation from Service**”). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A and you are a “specified employee” of the Company or any affiliate (or any successor entity thereto) within the meaning of Section 409A(a)(2)(B)(i) of the Code on the date of your Separation from Service, then the payment of any such benefits shall be delayed until the earlier of (i) the date that is six (6) months and one (1) day after the date of your Separation from Service, or (ii) the date of your death (such date, the “**Delayed Payment Date**”), and the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the benefit payments that otherwise would have been paid to you on or before the Delayed Payment Date, without any adjustment on account of such delay, and (B) continue the benefit payments in accordance with any applicable payment schedules set forth for the balance of the period specified herein. In addition to the above, to the extent required to comply with Section 409A and the applicable regulations and guidance issued thereunder, if the applicable deadline for you to execute (and not revoke) the applicable Release and Waiver spans two (2) calendar years, your Severance Benefits and/or Change of Control Severance Benefits shall commence to be paid in installments on the first regularly scheduled payroll date that follows the effective date of the Release and Waiver and which also occurs during the second permitted calendar year for returning the effective Release and Waiver.

9. Section 280G; Limitations on Payment.

(a) If any payment or benefit you will or may receive from the Company or otherwise (a “**280G Payment**”) would (i) any constitute a “parachute payment” within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “**Excise Tax**”), then any such 280G Payment provided pursuant to this Agreement (a “**Payment**”) shall be equal to the Reduced Amount. The “**Reduced Amount**” shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the “**Reduction Method**”) that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the “**Pro Rata Reduction Method**”).

(b) Notwithstanding any provision of Section 12(a) to the contrary, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (i) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (ii) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (iii) as a third priority, Payments that are “deferred compensation” within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(c) Unless you and the Company agree on an alternative accounting firm or law firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change of Control transaction shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control transaction, the Company shall appoint a nationally recognized accounting or law firm to make the determinations required by this Section 9. The Company shall bear all expenses with respect to the determinations by such accounting or law firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting or law firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other time as requested by you or the Company.

(d) If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of Section 12(a) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you agree to promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of Section 12(a) so that no portion of the remaining Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of Section 12(a), you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

10. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with the Company, or the termination of your employment with the Company, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted by JAMS, Inc. ("JAMS") or its successors by a single arbitrator. The arbitration will be held in San Diego, California, or such other location as then-agreed by the parties. ***Both you and the Company acknowledge that by agreeing to this arbitration procedure, you each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.***

Any such arbitration proceeding will be governed by JAMS' then applicable rules and procedures for employment disputes, which will be provided to you upon request and also currently available at <http://www.jamsadr.com/rules-employment-arbitration/>. In any such proceeding, the arbitrator shall (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator's essential findings and conclusions and a statement of the award. You and the Company shall be entitled to all rights and remedies that would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or you from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. You and the Company both have the right to be represented by legal counsel at any arbitration proceeding, at each party's own expense. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law and shall pay the arbitrator's fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

11. General. This Agreement, along with the Confidentiality Agreement, forms the complete and exclusive statement of your agreement with the Company regarding the subject matter hereof. It supersedes and replaces any other agreements or promises made to you by anyone concerning your employment compensation, benefits and/or terms, whether oral or written. This Agreement may not be amended or modified except by a written modification signed by you and a duly authorized officer of the Company, with the exception of those changes expressly reserved to the Company's discretion in this Agreement. This Agreement is governed by the laws of the state of California, without reference to conflicts of law principles, and it is intended to bind and inure to the benefit of and be enforceable by the Company and its successors and assigns. If any provision of this Agreement shall be held invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect the other provisions of this Agreement, and such provision will be reformed, construed and enforced so as to render it valid and enforceable consistent with the general intent of the parties insofar as possible under applicable law. With respect to the enforcement of this Agreement, no waiver of any right hereunder shall be effective unless it is in writing. Any ambiguity in this Agreement shall not be construed against either party as the drafter. This Agreement may be executed in counterparts which shall be deemed to be part of one original, and facsimile signatures shall be equivalent to original signatures.

This offer is subject to satisfactory proof of your identity and right to work in the United States and other applicable pre-employment screenings.

To confirm your terms of employment, please sign and date this Agreement and the Confidentiality Agreement and return the fully signed documents to Jennifer Bush at . Please let me know if you have any questions.

Sincerely,

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan

Fred Aslan, MD
Chief Executive Officer

Reviewed, Understood, and Accepted:

/s/ Neha Krishnamohan

Neha Krishnamohan

4/15/2024

Date

Artiva Biotherapeutics, Inc. | 5505 Morehouse Drive, Suite 100, San Diego CA

// 8



September 14, 2020

Dr. Heather Raymon

Private & Confidential

Re: Employment Offer letter

Dear Heather,

On behalf of Artiva Biotherapeutics, Inc. (the "Company"), I am pleased to offer you employment under the terms set forth in this offer letter agreement (this "Agreement"). These employment terms will be effective as of your start date, which will be on or around October 22, 2020 (the "Start Date").

1. Employment Position; Duties. You will be employed as the Company's Vice President, Early Development & Program Management. As Vice President, Early Development & Program Management, you will have those duties and responsibilities as are customary for this position and as may be directed by the Company. When permitted to do so, you will work from the corporate office in San Diego. Your position may require business travel. During your employment, you will devote your full-time best efforts to the business of the Company.

2. Base Salary; Employee Benefits and Business Expenses.

(a) Base Salary. Your initial base salary will be paid at the annual rate of \$275,000.00 less standard payroll deductions and tax withholdings. Your base salary will be paid on the Company's normal payroll schedule. As an exempt salaried employee, you will be required to work the Company's normal business hours, and such additional time as appropriate for your work assignments and position. You will not be eligible for extra payment under the overtime laws.

(b) Employee Benefits. As a regular full-time employee, you will be eligible to participate in the Company's standard employee benefits (pursuant to the terms and conditions of the benefit plans and applicable policies), as they may be terminated or changed from time to time within the Company's discretion.

(c) Business Expenses. Your legitimate and documented business expenses will be reimbursed by the Company as provided under its business expense reimbursement policies.

3. Annual Bonus. In addition to base salary, you will be eligible to earn discretionary incentive compensation at an annual target amount of twenty-five percent (25%) of your base salary in effect during the bonus year. With respect to the annual incentive compensation program, the Company's executive team will evaluate and recommend specific

Artiva Biotherapeutics, Inc. | 4747 Executive Drive, Suite 1150, San Diego, CA

1/7

annual individual and corporate performance targets, metrics and/or management-by-objectives (“MBOs”), to be finalized and approved by the Company’s Board of Directors (the “Board”), as part of its annual compensation review process. Annual bonuses are paid on an annual basis, after the close of the fiscal year and after determination by the Board of (a) the level of achievement of the applicable individual and corporate performance targets, metrics and/or MBOs, and (b) the amount of the annual incentive compensation earned by you (if any). No amount of annual incentive compensation is guaranteed and, in addition to the other conditions for earning such compensation, you must remain an employee in good standing of the Company on the scheduled annual incentive compensation payment date in order to be eligible for any annual incentive compensation. This annual incentive compensation program will be the only incentive compensation, commissions, or other bonus program that will apply to you.

4. Equity Award. Upon joining the Company, and subject to approval by the Company’s Board of Directors, you will be eligible to receive a stock option to purchase 80,000 shares of common stock. The purchase price per share will be equal to the fair market value of the Company’s common stock on the date of grant. Twenty-five percent (25%) of the shares subject to the option will vest on the one year anniversary of your hire date and the remainder will vest in equal monthly installments thereafter over the next thirty-six (36) months, subject to your continued service with the Company. The terms of the option will be governed by the Company’s 2020 Equity Incentive Plan (the “Plan”) and an option award agreement between you and the Company.

5. Compliance with Confidentiality Agreement and Company Policies. As a condition of employment, you shall sign and comply with the Company’s standard form of Employee Confidential Information and Invention Assignment Agreement (the “Confidentiality Agreement”). The Confidentiality Agreement shall be deemed fully incorporated into this Agreement by reference.

6. Protection of Third-Party Information and Outside Activities.

(a) Third Party Information. In your work for the Company, you will be expected not to make any unauthorized use or disclosure of any confidential information or materials, including trade secrets, of any former employer or other third party; and not to violate any lawful agreement that you may have with any third party. By signing this Agreement, you represent that you are able to perform your job duties within these guidelines, and you are not in unauthorized possession or control of any confidential documents, information, or other property of any former employer. In addition, you represent that you have disclosed to the Company in writing any agreement you may have with any third party (e.g., a former employer) that may limit your ability to perform your duties to the Company or that could present a conflict of interest with the Company, including but not limited to disclosure (and a copy) of any contractual restrictions on solicitations or competitive activities.

(b) Outside Activities. During your employment by the Company, you may engage in civic and not-for-profit activities so long as such activities do not interfere with the performance of your duties hereunder or present a conflict of interest with the Company or its Affiliates. Subject to the restrictions set forth herein, and only with prior written disclosure to and written consent of the Board, you may engage in other types of business or public activities. The Board may withdraw such consent, if the Board determines, in its sole discretion, that such activities compromise or threaten to compromise the business interests of the Company or its Affiliates or conflict with your duties to the Company.

(c) Non-Competition. During your employment by the Company, you will not, without the express written consent of the Board, directly or indirectly serve as an officer, director, stockholder, employee, partner, proprietor, investor, joint venturer, associate, representative or consultant of any person or entity engaged in, or planning or preparing to engage in, business activity competitive with any line of business engaged in (or planned to be engaged in) by the Company or its Affiliates; provided, however, that you may purchase or otherwise acquire up to (but not more than) one percent (1%) of any class of securities of any enterprise (without participating in the activities of such enterprise) if such securities are listed on any national or regional securities exchange. In addition, you will be subject to certain restrictions (including restrictions continuing after your employment ends) under the terms of your Confidentiality Agreement.

7. At-Will Employment Relationship. Your employment relationship with the Company is employment at-will. Accordingly, you may terminate your employment with the Company at any time and for any reason whatsoever simply by notifying the Company; and the Company may terminate your employment at any time with or without Cause (as defined below) or prior notice. In addition, the Company retains the discretion to modify your other employment terms from time to time, including but not limited to your position, duties, reporting relationship, work location, compensation (including base salary and incentive compensation terms), and benefits.

8. Severance.

(a) Severance for Qualifying Termination. If subsequent to the Series A financing (i) your employment is terminated by the Company without Cause, other than due to your death or disability, and (ii) you satisfy the Release Requirement (defined below), then you will receive the Severance Payments (defined below) as your sole severance benefits, and you will not be eligible for severance benefits under any other policy, plan or agreement. Specifically, you will receive severance pay in the form of continuation of your final monthly base salary for six (6) months only if your termination occurs subsequent to the Series A Financing, less standard payroll deductions and tax withholdings (the “Severance Payments”). Subject to Section 8(e), the Severance Payments will be paid in equal installments on the Company’s regular payroll schedule in effect following your termination date, with such payments to begin on the first regular payroll date following the Release Effective Date (as defined below). If the Severance Payments do not commence with the first regular payroll date following your termination date because the Release Effective Date is later than such first payroll date, the first installment of the Severance Payments you receive will be a “catch up” payment in the total amount of the Severance Payments you would have received through such payroll date if such payments had begun with the first payroll date after your termination date.

(b) Release Requirement. To be eligible for the Severance Payments pursuant to Section 8(a) above you must satisfy the following release requirement (the “Release Requirement”): return to the Company a signed and dated general release of all known and unknown claims in a separation agreement acceptable to the Company (the “Release and Waiver”) within the applicable deadline set forth therein, but in no event later than forty-five (45) calendar days following your termination date, and permit the Release and Waiver to become effective and irrevocable in accordance with its terms (such effective date of the Release and Waiver, the “Release Effective Date”). No Severance Payments will be paid hereunder prior to such Release Effective Date. You may be required by the separation agreement to provide reasonable transitional services as a condition of payment of Severance Payments.

(c) Definition of Cause. For purposes of this Agreement, “Cause” means the occurrence of any one or more of the following: (i) your conviction of, or plea of no contest, or commission of any felony or any crime involving fraud, embezzlement, dishonesty or moral turpitude; (ii) your attempted commission of, or participation in, a fraud, embezzlement or act of dishonesty (or an attempted fraud or act of dishonesty) that results in (or could result in) material harm to the Company, including but not limited to material harm to reputational interests; (iii) your violation of a fiduciary duty or duty of loyalty owed to the Company; (iv) your material breach of any contract or agreement between you and the Company, or any material Company policies that are disclosed or otherwise made available in writing to you prior to such breach; (v) persistent neglect of your job duties, which is not cured within fifteen (15) calendar days after you are provided written notice by the Company (provided, that such written notice and opportunity to cure are not required if your performance or neglect is not reasonably susceptible to being cured); or (vi) your gross misconduct or material failure to comply with a reasonable written instruction of the Company.

(d) Other. You will not be eligible for any Severance Payments under any circumstances other than those described herein, including circumstances in which your employment is terminated for Cause, you terminate your employment for any reason, or your employment terminates due to your death or disability. In addition, if you materially breach any continuing obligations to the Company (including, but not limited to, any material breach of this Agreement or any material breach of the Confidentiality Agreement) during the period of time that you are receiving any Severance Payments, you will forfeit your entitlement to any then unpaid Severance Payments, and the Company’s obligation to continue to pay or provide such Severance Payments will immediately terminate as of the date of your material breach.

(e) IRS Code Section 409A. All payments provided hereunder are intended to constitute separate payments for purposes of Treasury Regulation Section 1.409A-2(b)(2). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A of the Internal Revenue Code of 1986 as amended (“Section 409A”), such benefits will not commence in connection with your termination of employment unless such termination also qualifies as a “separation from service” with the Company within the meaning of Treasury Regulation Section 1.409A-1(h) (without regard to any permissible alternative definition thereunder) (“Separation from Service”). If the Company determines that any benefits provided under this Agreement constitute “deferred compensation” under Section 409A and you are a “specified employee” of the Company or any affiliate (or any successor entity thereto) within the meaning of Section 409A(a)(2)(B)(i) of the Code on the date of your Separation from Service, then the payment of any such benefits shall be delayed until the earlier of (i) the date that is six (6) months and one (1) day after the date of your Separation from Service, or (ii) the date of your death (such date, the “Delayed Payment Date”), and the Company (or the successor entity thereto, as applicable) shall (A) pay to you a lump sum amount equal to the sum of the benefit payments that otherwise would have been paid to you on or before the Delayed Payment Date, without any adjustment on account of such delay, and (B) continue the benefit payments in accordance with any applicable payment schedules set forth for the balance of the period specified herein. In addition to the above, to the extent required to comply with Section 409A and the applicable regulations and guidance issued thereunder, if the applicable deadline for you to execute (and not revoke) the applicable Release and Waiver spans two (2) calendar years, your Severance Payments shall commence to be paid in installments on the first regularly scheduled payroll date that occurs in the second calendar year after the Release Effective Date of the Release and Waiver.

9. Section 280G; Limitations on Payment.

(a) If any payment or benefit you will or may receive from the Company or otherwise (a “280G Payment”) would (i) any constitute a “parachute payment” within the meaning of Section 280G of the Code, and (ii) but for this sentence, be subject to the excise tax imposed by Section 4999 of the Code (the “Excise Tax”), then any such 280G Payment provided pursuant to this Agreement (a “Payment”) shall be equal to the Reduced Amount. The “Reduced Amount” shall be either (x) the largest portion of the Payment that would result in no portion of the Payment (after reduction) being subject to the Excise Tax or (y) the largest portion, up to and including the total, of the Payment, whichever amount (i.e., the amount determined by clause (x) or by clause (y)), after taking into account all applicable federal, state and local employment taxes, income taxes, and the Excise Tax (all computed at the highest applicable marginal rate), results in your receipt, on an after-tax basis, of the greater economic benefit notwithstanding that all or some portion of the Payment may be subject to the Excise Tax. If a reduction in a Payment is required pursuant to the preceding sentence and the Reduced Amount is determined pursuant to clause (x) of the preceding sentence, the reduction shall occur in the manner (the “Reduction Method”) that results in the greatest economic benefit for you. If more than one method of reduction will result in the same economic benefit, the items so reduced will be reduced pro rata (the “Pro Rata Reduction Method”).

(b) Notwithstanding any provision of Section 9(a) to the contrary, if the Reduction Method or the Pro Rata Reduction Method would result in any portion of the Payment being subject to taxes pursuant to Section 409A that would not otherwise be subject to taxes pursuant to Section 409A, then the Reduction Method and/or the Pro Rata Reduction Method, as the case may be, shall be modified so as to avoid the imposition of taxes pursuant to Section 409A as follows: (i) as a first priority, the modification shall preserve to the greatest extent possible, the greatest economic benefit for you as determined on an after-tax basis; (ii) as a second priority, Payments that are contingent on future events (e.g., being terminated without Cause), shall be reduced (or eliminated) before Payments that are not contingent on future events; and (iii) as a third priority, Payments that are “deferred compensation” within the meaning of Section 409A shall be reduced (or eliminated) before Payments that are not deferred compensation within the meaning of Section 409A.

(c) Unless you and the Company agree on an alternative accounting firm or law firm, the accounting firm engaged by the Company for general tax compliance purposes as of the day prior to the effective date of the Change of Control transaction shall perform the foregoing calculations. If the accounting firm so engaged by the Company is serving as accountant or auditor for the individual, entity or group effecting the Change in Control transaction, the Company shall appoint a nationally recognized accounting or law firm to make the determinations required by this Section 9. The Company shall bear all expenses with respect to the determinations by such accounting or law firm required to be made hereunder. The Company shall use commercially reasonable efforts to cause the accounting or law firm engaged to make the determinations hereunder to provide its calculations, together with detailed supporting documentation, to you and the Company within fifteen (15) calendar days after the date on which your right to a 280G Payment becomes reasonably likely to occur (if requested at that time by you or the Company) or such other time as requested by you or the Company.

(d) If you receive a Payment for which the Reduced Amount was determined pursuant to clause (x) of Section 9(a) and the Internal Revenue Service determines thereafter that some portion of the Payment is subject to the Excise Tax, you agree to promptly return to the Company a sufficient amount of the Payment (after reduction pursuant to clause (x) of Section 9(a) so that no portion of the remaining Payment is subject to the Excise Tax. For the avoidance of doubt, if the Reduced Amount was determined pursuant to clause (y) of Section 9(a), you shall have no obligation to return any portion of the Payment pursuant to the preceding sentence.

10. Dispute Resolution. To ensure the rapid and economical resolution of disputes that may arise in connection with your employment with the Company, you and the Company agree that any and all disputes, claims, or causes of action, in law or equity, including but not limited to statutory claims, arising from or relating to the enforcement, breach, performance, or interpretation of this Agreement, your employment with the Company, or the termination of your employment with the Company, will be resolved pursuant to the Federal Arbitration Act, 9 U.S.C. §1-16, and to the fullest extent permitted by law, by final, binding and confidential arbitration conducted by JAMS, Inc. ("JAMS") or its successors by a single arbitrator. The arbitration will be held in San Diego, California, or such other location as then-agreed by the parties. ***Both you and the Company acknowledge that by agreeing to this arbitration procedure, you each waive the right to resolve any such dispute through a trial by jury or judge or administrative proceeding.***

Any such arbitration proceeding will be governed by JAMS' then applicable rules and procedures for employment disputes, which will be provided to you upon request. In any such proceeding, the arbitrator shall (a) have the authority to compel adequate discovery for the resolution of the dispute and to award such relief as would otherwise be permitted by law; and (b) issue a written arbitration decision including the arbitrator's essential findings and conclusions and a statement of the award. You and the Company shall be entitled to all rights and remedies that either would be entitled to pursue in a court of law. Nothing in this Agreement is intended to prevent either the Company or you from obtaining injunctive relief in court to prevent irreparable harm pending the conclusion of any such arbitration pursuant to applicable law. The Company shall pay all filing fees in excess of those which would be required if the dispute were decided in a court of law, and shall pay the arbitrator's fees and any other fees or costs unique to arbitration. Any awards or orders in such arbitrations may be entered and enforced as judgments in the federal and state courts of any competent jurisdiction.

11. General. This Agreement, along with the Confidentiality Agreement, forms the complete and exclusive statement of your agreement with the Company regarding the subject matter hereof. It supersedes and replaces any other agreements or promises made to you by anyone concerning your employment compensation, benefits and/or terms, whether oral or written. This Agreement may not be amended or modified except by a written modification signed by you and a duly authorized officer of the Company, with the exception of those changes expressly reserved to the Company's discretion in this Agreement. This Agreement is governed by the laws of the state of California, without reference to conflicts of law principles, and it is intended to bind and inure to the benefit of and be enforceable by the Company and its successors and assigns. If any provision of this Agreement shall be held invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect the other provisions of this Agreement, and such provision will be reformed, construed and enforced so as to render it valid and enforceable consistent with the general intent of the parties insofar as possible under applicable law. With respect to the enforcement of this Agreement, no waiver of any right hereunder shall be effective unless it is in writing. Any ambiguity in this Agreement shall not be construed against either party as the drafter. This Agreement may be executed in counterparts which shall be deemed to be part of one original, and facsimile signatures shall be equivalent to original signatures.

To confirm your terms of continuing employment, please sign and date this Agreement and the Confidentiality Agreement and return the fully signed documents to Anne Frese at . Please let me know if you have any questions.

Artiva Biotherapeutics, Inc. | 4747 Executive Drive, Suite 1150, San Diego, CA

6/7

Sincerely,

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Thomas J. Farrell

Thomas J. Farrell
President & CEO

Reviewed, Understood, and Accepted:

/s/ Heather Raymon

Heather Raymon, PhD.

Sept. 17th 2020

Date

Artiva Biotherapeutics, Inc. | 4747 Executive Drive, Suite 1150, San Diego, CA

7/7

CONSULTING AGREEMENT

THIS CONSULTING AGREEMENT (the “**Agreement**”) is made by and between **ARTIVA BIOTHERAPEUTICS, INC.** (“**Company**”) and **DIEGO MIRALLES** (“**Consultant**”), effective as of **NOVEMBER 1, 2023** (the “**Effective Date**”).

Company desires to benefit from Consultant’s expertise and experience by retaining Consultant as a consultant, and Consultant wishes to perform consulting services for Company, as provided for below. Accordingly, Company and Consultant agree as follows:

1. ENGAGEMENT OF SERVICES. Subject to the terms of this Agreement, Consultant agrees to provide consulting services to Company as described in **EXHIBIT A** hereto (collectively, the “**Services**”) during the term of this Agreement. Consultant agrees to exercise diligence and the highest degree of professionalism in providing Services under this Agreement. Company will make its facilities and equipment available to Consultant when necessary. Consultant may not subcontract or otherwise delegate Consultant’s obligations under this Agreement without Company’s prior written consent. Consultant shall perform all Services in compliance with all applicable laws.

2. COMPENSATION. As sole compensation for the performance of the Services, Company will pay to Consultant the amounts and on the schedule specified in **EXHIBIT A**. Consultant will be reimbursed for expenses as specified in **EXHIBIT A**.

3. INDEPENDENT CONTRACTOR RELATIONSHIP. Consultant’s relationship with Company is that of an independent contractor, and nothing in this Agreement is intended to, or should be construed to, create a partnership, agency, joint venture or employment relationship with Company and Consultant. Consultant is not entitled to and will be excluded from participating in any of Company’s fringe benefit plans or programs as a result of the performance of the Services, including, but not limited to, health, sickness, accident or dental coverage, life insurance, disability benefits, accidental death and dismemberment coverage, unemployment insurance coverage, workers’ compensation coverage, and pension or 401(k) benefit(s) provided by Company to its employees (and Consultant waives the right to receive any such benefits). Consultant agrees, as an independent contractor, that Consultant is not entitled to unemployment benefits in the event this Agreement terminates, or workers’ compensation benefits in the event that Consultant (or employees thereof) is injured in any manner or becomes ill while performing the Services under this Agreement. Consultant is solely responsible for all tax returns, payments, or reports required to be filed with or made to any federal, state or local tax authority with respect to Consultant’s performance of Services and receipt of fees under this Agreement. Consultant has discretion to set Consultant’s own hours, and Consultant will use Consultant’s own computers, software, and other IT equipment. Consultant is not authorized to make any representation, contract or commitment on behalf of Company, unless specifically requested or authorized to do so by an executive officer of Company. No part of Consultant’s compensation will be subject to withholding by Company for the payment of any social security, federal, state or any other employee payroll taxes. Company will regularly report any amounts paid to Consultant by filing Form 1099-MISC with the Internal Revenue Service as required by law. Consultant hereby agrees to indemnify and defend Company against any and all income and employment taxes or contributions owed as a result of any fees and payments made to Consultant hereunder, including penalties and interest.

4. TRADE SECRETS; INTELLECTUAL PROPERTY RIGHTS.

4.1 Confidential Information. Consultant agrees during the term of this Agreement and thereafter that Consultant will take all steps necessary to hold Company’s Confidential Information in trust and confidence, will not use Confidential Information in any manner or for any purpose not expressly set forth in this Agreement, and will not disclose any such Confidential Information to any third party without first obtaining Company’s express written consent on a case-by-case basis. “**Confidential Information**” includes, but is not limited to, all information related to Company’s business and Consultant’s actual or anticipated research and development, including without limitation (a) trade secrets, inventions, ideas, processes, computer source and object code, formulae, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs, and techniques; (b) information regarding products or plans for research and development, marketing and business plans, budgets, financial statements, contracts, prices, suppliers, clients and customers; (c) information regarding the skills and compensation of Company’s employees, contractors, and any other service providers of Company; and (d) the existence of any business

discussions, negotiations, or agreements between Company and any third party. In addition, “**Company Work Product**” (defined below) shall constitute Confidential Information. Notwithstanding the other provisions of this Agreement, nothing received by Consultant will be considered to be Confidential Information if Consultant can demonstrate by clear and convincing evidence that: (i) it has been published or is otherwise readily available to the public other than by a breach of this Agreement; (ii) it has been rightfully received by Consultant from a third party without confidential limitations; (iii) it has been independently developed for Consultant by personnel or agents having no access to Company Confidential Information, as evidenced by Consultant’s written records; or (iv) it was known to Consultant prior to its first receipt from Company, except in the case of Company Work Product, which shall not be subject to the exception in this Section 4.1 Further, notwithstanding the other provisions of this Agreement, pursuant to 18 U.S.C. Section 1833(b), Consultant shall not be held criminally or civilly liable under any federal or state trade secret law for the disclosure of a trade secret that is made in confidence to a federal, state, or local government official, either directly or indirectly, or to an attorney, and solely for the purpose of reporting or investigating a suspected violation of law; or is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

4.2 Third Party Information. Consultant understands that Company has received and will in the future receive from third parties confidential or proprietary information (“**Third Party Information**”) subject to a duty on Company’s part to maintain the confidentiality of such information and use it only for certain limited purposes. Consultant agrees to hold Third Party Information in confidence and not to disclose to anyone (other than Company personnel who need to know such information in connection with their work for Company) or to use, except in connection with Consultant’s work for Company, Third Party Information unless expressly authorized in writing by an executive officer of Company.

4.2 No Conflict of Interest. Consultant agrees during the term of this Agreement not to accept work or enter into a contract or accept an obligation inconsistent or incompatible with Consultant’s obligations under this Agreement or the scope of services rendered for Company. Consultant warrants that to the best of Consultant’s knowledge, there is no other existing contract or duty on Consultant’s part inconsistent with this Agreement. Consultant further agrees not to disclose to Company, or bring onto Company’s premises, or induce Company to use any confidential information that belongs to anyone other than Company or Consultant. In addition, Consultant agrees that, during the term of this Agreement, Consultant will not perform, or agree to perform, any services for any third party that engages in the Company’s Business (as defined in section 6.5 below).

4.3 Disclosure of Work Product. As used in this Agreement, the term “**Work Product**” means any trade secrets, ideas, inventions (whether patentable or unpatentable), mask works, processes, procedures, formulations, formulas, software source and object codes, data, programs, other works of authorship, know-how, improvements, discoveries, developments, designs and techniques, trademarks, manufacturing techniques, or other copyrightable or patentable works. Consultant agrees to disclose promptly in writing to Company, or any person designated by Company, all Work Product that is solely or jointly conceived, made, reduced to practice, or learned by Consultant in the course of any work or Services performed for Company (“**Company Work Product**”).

4.4 Assignment of Company Work Product. Consultant irrevocably assigns to Company all right, title, and interest worldwide in and to Company Work Product and all applicable intellectual property rights related to Company Work Product, including without limitation, copyrights, trademarks, trade secrets, patents, moral rights, contract, and licensing rights (the “**Proprietary Rights**”). Consultant retains no rights to use Company Work Product and agrees not to challenge the validity of Company’s ownership in Company Work Product.

4.5 Waiver of Assignment of Other Rights. If Consultant has any rights to Company Work Product that cannot be assigned to Company, Consultant unconditionally and irrevocably waives the enforcement of such rights and all claims and causes of action of any kind against Company with respect to such rights. Consultant agrees, at Company’s request and expense, to consent to and join in any action to enforce such rights. If Consultant has any right to Company Work Product that cannot be assigned to Company or waived by Consultant, Consultant unconditionally and irrevocably grants to Company during the term of such rights, an exclusive, irrevocable, perpetual, worldwide, fully paid and royalty-free license, with rights to sublicense through multiple levels of sublicensees, to reproduce, create derivative works of, distribute, publicly perform and publicly display by all means now known or later developed, such rights.

4.6 Assistance. Consultant agrees to cooperate with Company or its designee(s), both during and after the term of this Agreement, in the procurement and maintenance of Company's rights in Company Work Product, and to execute, when requested, any other documents deemed necessary by Company to carry out the purpose of this Agreement.

4.7 Enforcement of Proprietary Rights. Consultant will assist Company in every proper way to obtain, and from time to time enforce, United States and foreign Proprietary Rights relating to Company Work Product in any and all countries. To that end Consultant will execute, verify, and deliver such documents and perform such other acts (including appearances as a witness) as Company may reasonably request for use in applying for, obtaining, perfecting, evidencing, sustaining, and enforcing such Proprietary Rights and the assignment thereof. In addition, Consultant will execute, verify, and deliver assignments of such Proprietary Rights to Company or its designee. Consultant's obligation to assist Company with respect to Proprietary Rights relating to such Company Work Product in any and all countries shall continue beyond the termination of this Agreement, but Company shall compensate Consultant at a reasonable rate after such termination for the time actually spent by Consultant at Company's request on such assistance.

4.8 Execution of Documents. In the event Company is unable for any reason, after reasonable effort, to secure Consultant's signature on any document needed in connection with the actions specified in the preceding Sections 4.7 and 4.8, Consultant hereby irrevocably designates and appoints Company and its duly authorized officers and agents as Consultant's agent and attorney in fact, which appointment is coupled with an interest, to act for and in Consultant's behalf to execute, verify, and file any such documents and to do all other lawfully permitted acts to further the purposes of the preceding paragraph with the same legal force and effect as if executed by Consultant. Consultant hereby waives and quitclaims to Company any and all claims, of any nature whatsoever, which Consultant now or may hereafter have for infringement of any Proprietary Rights assigned hereunder to Company.

5. CONSULTANT REPRESENTATIONS AND WARRANTIES. Consultant hereby represents and warrants that (a) Company Work Product will be an original work of Consultant; (b) neither Company Work Product nor any element thereof will be subject to any restrictions or to any mortgages, liens, pledges, security interests, encumbrances, or encroachments; (c) Consultant will not grant, directly or indirectly, any rights or interest whatsoever in Company Work Product to third parties; and (d) Consultant has full right and power to enter into and perform this Agreement without the consent of any third party.

6. TERM AND TERMINATION.

6.1 Term. Subject to Sections 6.1 and 6.2 below, the term of this Agreement will begin as of the Effective Date and will automatically terminate on the six-month anniversary of the Effective Date, unless the length of the term of this Agreement is extended in a writing signed by both parties.

6.2 Termination by Company. Company may terminate this Agreement at its convenience and without any breach by Consultant upon 14 days' prior written notice to Consultant. Company may also terminate this Agreement immediately in its sole discretion upon Consultant's material breach of Section 4, Section 6.4, Section 6.5 and/or Section 6.6.

6.3 Termination by Consultant. Consultant may terminate this Agreement at any time upon 14 days' prior written notice to Company.

6.4 Noninterference. During the term of this Agreement and for a period of one year immediately following termination of this Agreement by either party, Consultant agrees not to solicit or induce (or attempt to solicit or induce) any employee, consultant, agent, or independent contractor to terminate or breach an employment, contractual, or other relationship with Company.

6.5 Noncompetition. In order to protect Company's Confidential Information, Consultant agrees that (a) during the term of this Agreement, and (b) for the one year period after the termination date of this Agreement, Consultant will not perform services anywhere in the world for, or in any way manage, operate, join, control or participate in the ownership, management, operation or control of, or be connected to as an employee, shareholder,

director, manager, member, consultant, adviser, volunteer, partner or otherwise, whether for compensation or not, any entity (including for my own account), that engages in Company's Business (as defined below). This provision does not require Consultant to liquidate any investments Consultant may have as of the Effective Date, and does not prohibit Consultant (x) from being a passive investor of not more than 2% of the outstanding stock of any class of a corporation which is publicly traded, so long as Consultant has no active participation in the business of such corporation; or (y) from joining a separate division of an entity or business, even if another division of such entity or business engages in Company's Business, provided that Consultant does not (i) perform any services for such other division, or (ii) provide any formal or informal advice or guidance to such other division. **"Company's Business"** means the research, development, manufacturing, production, marketing or sale of natural killer cell therapies. In addition, during the term of this Agreement, in the event that Consultant agreement to perform services anywhere in the world for, or in any way manage, operate, join, control or participate in the ownership, management, operation or control of, or be connected to as an employee, shareholder, director, manager, member, consultant, adviser, volunteer, partner or otherwise, whether for compensation or not, any entity that engages in the research, development, manufacturing, production, marketing or sale of (i) cellular immunotherapies not utilizing natural killer cells, or (ii) bispecific antibodies, in either case for use in oncology or autoimmunity, Consultant shall immediately notify Company, and Company shall have the right to immediately terminate this agreement. In the event that Company terminates the Agreement under this Section 6.5, Company shall owe Consultant a pro-rated retainer fee for the month in which the termination occurs, and vesting of any equity awards shall cease as of the termination date.

6.6 Return of Company Property. Unless otherwise authorized by Company, upon termination of the Agreement or earlier as requested by Company, Consultant will deliver to Company any and all drawings, notes, memoranda, specifications, devices, formulas, and documents, together with all copies thereof, and any other material containing or disclosing any Company Work Product, Third Party Information, or Proprietary Information of Company. Consultant further agrees that any property situated on Company's premises and owned by Company, including all forms of storage media, filing cabinets or other work areas, is subject to inspection by Company personnel at any time with or without notice.

6.7 Survival. The following provisions shall survive termination of this Agreement: Section 4, Section 5, Section 6.4, Section 6.5, Section 6.6, Section 7 and Section 8.

7. INDEMNIFICATION. Consultant will indemnify, defend and hold Company harmless from and against any and all losses, claims, and expenses (including reasonable attorneys' fees) directly or indirectly arising out of, or resulting from, (a) Consultant's commission of any act or omission related to the Services Consultant performs; (b) Consultant's unauthorized use of any Confidential Information; or, (c) Consultant's material breach of any representation, warranty, or covenant contained in this Agreement, or otherwise made to the Company.

8. GENERAL PROVISIONS.

8.1 Governing Law. This Agreement shall be governed and construed in accordance with the laws of the State of California and all claims relating to or arising out of this Agreement, or the breach thereof, whether sounding in contract, tort or otherwise, shall likewise be governed by the laws of the state of California. The parties consent to and agree that service of any summons and complaint or other process in any such action or proceeding may be made by registered or certified mail in addition to personal service, or any other form of service contemplated by the laws of the state of California.

8.2 Severability. In case any one or more of the provisions contained in this Agreement shall, for any reason, be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect the other provisions of this Agreement, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained herein. If moreover, any one or more of the provisions contained in this Agreement shall for any reason be held to be excessively broad as to duration, geographical scope, activity, or subject, it shall be construed by limiting and reducing it, so as to be enforceable to the extent compatible with the applicable law as it shall then appear.

8.3 No Assignment. This Agreement may not be assigned by Consultant without Company's consent, and any such attempted assignment shall be void and of no effect.

8.4 Notices. All notices, requests, and other communications under this Agreement must be in writing and must be mailed by registered or certified mail, postage prepaid and return receipt requested, electronic mail, or delivered by hand to the party to whom such notice is required or permitted to be given. If mailed, any such notice will be considered to have been given five (5) business days after it was mailed, as evidenced by the postmark. If emailed, any such notice will be considered to have been given upon acknowledgment of receipt of electronic transmission. If delivered by hand, any such notice will be considered to have been given when received by the party to whom notice is given, as evidenced by written and dated receipt of the receiving party. The address for notice to either party will be the address shown on the signature page of this Agreement. Either party may change its address by notice as provided by this section.

8.5 Legal Fees. If any dispute arises between the parties with respect to the matters covered by this Agreement which leads to a proceeding to resolve such dispute, the prevailing party in such proceeding shall be entitled to receive its reasonable attorneys' fees, expert witness fees, and out-of-pocket costs incurred in connection with such proceeding, in addition to any other relief it may be awarded.

8.6 Injunctive Relief. A breach of any of the promises or agreements contained in this Agreement may result in irreparable and continuing damage to Company for which there may be no adequate remedy at law, and Company is therefore entitled to seek injunctive relief as well as such other and further relief as may be appropriate.

8.7 Waiver. No waiver by Company of any breach of this Agreement shall be a waiver of any preceding or succeeding breach. No waiver by Company of any right under this Agreement shall be construed as a waiver of any other right. Company shall not be required to give notice to enforce strict adherence to all terms of this Agreement.

8.8 Entire Agreement. This Agreement is the final, complete, and exclusive agreement of the parties with respect to the subject matter hereof. This Agreement supersedes all prior discussions between the parties. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing and signed by Consultant and an executive officer of Company. The terms of this Agreement will govern all Services undertaken by Consultant for Company.

[REMAINDER OF THIS PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have caused this Consulting Agreement to be executed by their duly authorized representative.

COMPANY:

ARTIVA BIOTHERAPEUTICS, INC.

By: /s/ Fred Aslan
Name: Fred Aslan
Title: CEO

Address: Artiva Biotherapeutics
 5505 Morehouse Drive
 Suite 100 San Diego, CA 92121
 USA

Email: Legal@artivabio.com

CONSULTANT:

DIEGO MIRALLES

/s/ Diego Miralles
(Signature)

Address: _____

EXHIBIT A

SERVICES

Amendment No. 1 to Consulting Agreement

This Amendment No. 1 (the “**Amendment**”), effective as of May 1, 2024, amends certain provisions of the Consulting Agreement dated November 1, 2023 (the “**Agreement**”), between Artiva Biotherapeutics, Inc. (“**Company**”), having its principal place of business at 5505 Morehouse Drive, Suite 100, San Diego, CA 92121 and Diego Miralles (“**Consultant**”).

WHEREAS, Company and Consultant find it in their respective interests to amend the provisions of the Agreement.

NOW THEREFORE, pursuant to such provision and for consideration duly given, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree to the following:

1. Except as expressly amended hereby, the Agreement shall continue to remain in full force and effect in accordance with its terms.
2. The first sentence of Section 6 of the Agreement is hereby deleted in its entirety and replaced with the following: “Subject to Sections 6.2 and 6.3 below, the term of this Agreement will begin as of the Effective Date and will continue through December 31, 2024.”
3. This Amendment may be executed in one or more counterparts, each of which shall be an original and all of which shall constitute together the same document. The Parties agree that signatures transmitted by electronic means (e.g. facsimile or a scanned version of the executed agreement in PDF format attached to an e-mail) shall bind the Parties. This Amendment is otherwise governed by the terms and conditions of the Original Agreement, except as amended hereby.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the undersigned parties have had this Amendment executed by its duly authorized representatives.

ARTIVA BIOTHERAPEUTICS, INC.

DIEGO MIRALLES

By: /s/ Jennifer Bush

/s/ Diego Miralles

Printed Name: Jennifer Bush

Email: _____

Title: Chief Operating Officer

Email: legal@artivabio.com



KPMG LLP
Suite 1100
4655 Executive Drive
San Diego, CA 92121-3132

Consent of Independent Registered Public Accounting Firm

We consent to the use of our report dated May 3, 2024, with respect to the financial statements of Artiva Biotherapeutics, Inc., included herein, and to the reference to our firm under the heading "Experts" in the prospectus.

KPMG LLP

San Diego, California
June 28, 2024

KPMG LLP, a Delaware limited liability partnership and a member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee.

Calculation of Filing Fee Tables

Form S-1

Artiva Biotherapeutics, Inc.

Table 1: Newly Registered Securities

	Security Type	Security Class Title	Fee Calculation or Carry Forward Rule	Amount Registered	Proposed Maximum Offering Price Per Unit	Maximum Aggregate Offering Price(1)(2)	Fee Rate	Amount of Registration Fee(3)
Fees to Be Paid	Equity	Common Stock, par value \$0.0001 per share	457(o)	—	—	\$100,000,000	0.00014760	\$14,760.00
	Total Offering Amounts					\$100,000,000	—	\$14,760.00
	Net Fee Due					—	—	\$14,760.00

- (1) Estimated solely for the purpose of computing the amount of the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended, or the Securities Act.
- (2) Includes the aggregate offering price of additional shares that the underwriters have the option to purchase, if any.
- (3) Calculated pursuant to Rule 457(o) under the Securities Act based on an estimate of the proposed maximum aggregate offering price.