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

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **April 26, 2021**

BROOKLYN IMMUNOTHERAPEUTICS, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**001-11460**	**31-1103425**
(State or Other Jurisdiction of Incorporation)	*(Commission File Number)*	*(IRS Employer Identification No.)*

140 58th Street, Building A, Suite 2100 **Brooklyn, New York**	**11220**
(Address of Principal Executive Offices)	*(Zip Code)*

Registrant's telephone number, including area code: **(212) 582-1199**

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Trading symbol**	**Name of each exchange on which registered**
Common Stock, par value $0.005 per share	BTX	NYSE American

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 or Rule 12b-2 of the Securities Exchange Act of 1934:

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 13(a) of the Exchange Act. ☐

Item 1.01 Entry into a Material Definitive Agreement.

Purchase and Registration Rights Agreements

On April 26, 2021, we entered into a purchase agreement, or the Purchase Agreement, with Lincoln Park Capital Fund, LLC, or Lincoln Park, under which, subject to specified terms and conditions, we may sell to Lincoln Park up to $20.0 million of shares of common stock, par value $0.005 per share, from time to time during the term of the Purchase Agreement.

Additionally, on April 26, 2021, we entered into a registration rights agreement, or the Registration Rights Agreement, with Lincoln Park, pursuant to which we agreed to file a registration statement with the Securities and Exchange Commission, or the SEC, covering the resale of shares of common stock issued to Lincoln Park under the Purchase Agreement.

Under the terms and subject to the conditions of the Purchase Agreement, we have the right, but not the obligation, to sell to Lincoln Park, and Lincoln Park is obligated to purchase up to $20.0 million of shares of common stock. Any such sale of common stock will be subject to specified limitations and may occur from time to time, at our discretion, over a 36-month period commencing after the date that a registration statement covering the resale of shares of common stock issued under the Purchase Agreement, which we agreed to file with the SEC pursuant to the Registration Rights Agreement, is declared effective by the SEC and a final prospectus in connection therewith is filed and the other conditions set forth in the Purchase Agreement are satisfied. Lincoln Park has no right to require us to sell any common stock to Lincoln Park, but Lincoln Park is obligated to make purchases as we direct, subject to conditions set forth in the Purchase Agreement.

Upon entering into the Purchase Agreement, we issued and sold 56,041 shares of common stock, or the Commitment Shares, to Lincoln Park as consideration for Lincoln Park's commitment to purchase up to $20.0 million shares of common stock under the Purchase Agreement.

Under the Purchase Agreement, we may elect from time to time, subject to specified conditions, to require the selling stockholder to purchase on any single business day on which the closing price of common stock is equal to or greater than $1.00, which we refer to as a Regular Purchase, (a) up to 60,000 shares of common stock, (b) if the closing sale price of common stock on the NYSE American is at least $5.50 per share, up to 80,000 shares of common stock or (c) if the closing sale price of common stock on the NYSE American is at least $7.00 per share, up to 120,000 shares of common stock. In no case, however, will the selling stockholder's commitment with respect to any single Regular Purchase exceed $1,000,000. The foregoing share amounts and per share prices will be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction occurring after the date of the Purchase Agreement with respect to common stock. The purchase price per share for each such Regular Purchase will be based on prevailing market prices of the common stock immediately preceding the time of sale, as determined under the Purchase Agreement.

In addition to Regular Purchases, we may also direct Lincoln Park to purchase other amounts as accelerated purchases or as additional accelerated purchases on the terms and subject to the conditions set forth in the Purchase Agreement.

Under applicable rules of the NYSE American, we would be required to obtain stockholder approval in order to sell to the selling stockholder under the Purchase Agreement more than 8,297,055 shares of common stock (including the Commitment Shares), which represents 19.99% of the 41,506,031 shares of common stock outstanding immediately prior to the execution of the Purchase Agreement, unless the price of all applicable sales of common stock to the selling stockholder under the Purchase Agreement equals or exceeds the lower of (A) the official closing price on the NYSE American immediately preceding the delivery by us of an applicable purchase notice under the Purchase Agreement and (B) the average of the closing prices of common stock on the NYSE American for the five business days immediately preceding the delivery by us of an applicable purchase notice under the Purchase Agreement, in each case plus $0.039, in which case the issuances and sales of common stock to the selling stockholder under the Purchase Agreement would be exempt from the limitation under applicable rules of the NYSE American.

The Purchase Agreement also prohibits us from directing Lincoln Park to purchase any shares of common stock if those shares, when aggregated with all other shares of common stock then beneficially owned by Lincoln Park and its affiliates, would result in Lincoln Park and its affiliates having beneficial ownership, at any single point in time, of more than 4.99% of the then total outstanding shares of common stock.

We may elect to terminate the Purchase Agreement at any time, without any cost or penalty. The Purchase Agreement does not include any of the following: limitations on our use of amounts we receive as the purchase price for shares of common stock sold to Lincoln Park; financial or business covenants; restrictions on future financings (other than restrictions on our ability to enter into an additional “equity line” or similar transaction whereby a specific investor is irrevocably bound pursuant to an agreement with us to purchase securities over a period of time from us at a price based on the market price of common stock at the time of such purchase); rights of first refusal; participation rights; penalties; or liquidated damages.

Our net proceeds under the Purchase Agreement will depend on the frequency of sales and the number of shares sold to Lincoln Park and prices at which we sell shares to Lincoln Park. We expect that any net proceeds we receive from such sales to Lincoln Park will be used for general corporate purposes, including working capital.

The foregoing descriptions of the Purchase Agreement and the Registration Rights Agreement are qualified in their entirety by reference to the full text of the Purchase Agreement and the Registration Rights Agreement, which are attached to this Current Report on Form 8-K as Exhibit 10.1 and Exhibit 10.2, respectively, and each of which is incorporated herein by reference.

This Current Report on Form 8-K shall not constitute an offer to sell or a solicitation of an offer to buy any shares of common stock, nor shall there be any sale of shares of common stock in any state or jurisdiction in which such an offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of any such state or other jurisdiction.

License Agreement

On April 26, 2021, our wholly owned subsidiary Brooklyn ImmunoTherapeutics, LLC, or Brooklyn LLC, entered into an exclusive license agreement, or the License Agreement, with Factor Bioscience Limited and Novellus Therapeutics Limited, which we refer to together the Licensor. Through the License Agreement, we acquired an exclusive worldwide license to develop and commercialize certain cell-based therapies to treat cancer and rare blood disorders, including sickle cell disease, based on Licensor's patented technology and know-how.

The License Agreement provides that Brooklyn LLC is obligated to pay the Licensor a total of $4,000,000 in connection with the execution of the License Agreement, of which $2,500,000 has been paid and the remaining $1,500,000 is expected to be paid in July 2021. Brooklyn LLC is obligated to pay to the Licensor additional fees of $5,000,000 in October 2021 and $7,000,000 in October 2022.

Under the terms of the License Agreement, Brooklyn LLC is required to use commercially reasonably efforts to achieve certain delineated milestones, including specified clinical development and regulatory milestones and specified commercialization milestones. In general, upon its achievement of these milestones, Brooklyn LLC will be obligated, in the case of development and regulatory milestones, to make milestone payments to Licensor in specified amounts and, in the case of commercialization milestones, to specified royalties with respect to product sales, sublicense fees or sales of pediatric review vouchers. In the event Brooklyn LLC fails to timely achieve certain delineated milestones, the Licensor may have the right to terminate the rights of Brooklyn LLC under provisions of the License Agreement relating to those milestones.

The Licensor is responsible for preparing, filing, prosecuting and maintaining all patent applications and patents under the License Agreement. If, however, the Licensor determines not to maintain a particular licensed patent or not to prepare, file and prosecute a licensed patent, Brooklyn LLC will have the right, but not the obligation, to assume those responsibilities in the territory at its expense.

The foregoing description of the License Agreement is qualified in its entirety by reference to the full text of the License Agreement, which is attached to this Current Report on Form 8-K as Exhibit 10.3 and which is incorporated herein by reference.

Item 3.02. Unregistered Sale of Equity Securities.

The information contained above in Item 1.01 is incorporated by reference into this Item 3.02.

Based in part upon the representations of Lincoln Park in the Purchase Agreement, the offering and sale of the issuance of the Commitment Shares to Lincoln Park was exempt from registration under Section 4(a)(2) of the Securities Act of 1933. Lincoln Park represented that it is an accredited investor, as such term is defined in Rule 501(a)(3) of Regulation D under the Securities Act of 1933, and that it is acquiring the shares for investment purposes only and not with a view to any resale, distribution or other disposition of shares in violation of the U.S. federal securities laws.

Item 9.01. Financial Statements and Exhibits.

Exhibit Number	Exhibit Description
10.1	Purchase Agreement, dated as of April 26, 2021, between Brooklyn ImmunoTherapeutics, Inc. and Lincoln Park Capital Fund, LLC
10.2	Registration Rights Agreement, dated as of April 26, 2021, between Brooklyn ImmunoTherapeutics, Inc. and Lincoln Park Capital Fund, LLC
10.3+*	Exclusive License Agreement, dated as of April 26, 2021, between Factor Bioscience Limited, Novellus Therapeutics Limited and Brooklyn ImmunoTherapeutics LLC

\+ Certain exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K. A copy of any omitted exhibit will be furnished to the Securities Exchange Commission or its staff upon request.

* Certain information redacted and replaced with "[***]",

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, hereunto duly authorized.

BROOKLYN IMMUNOTHERAPEUTICS, INC.

Dated: April 30, 2021

By: /s/ Howard J. Federoff
Howard J. Federoff
Chief Executive Officer and President

Exhibit 10.1

PURCHASE AGREEMENT

PURCHASE AGREEMENT (the "Agreement"), dated as of April 26, 2021, by and between **BROOKLYN IMMUNOTHERAPEUTICS, INC.**, a Delaware corporation (the "Company"), and **LINCOLN PARK CAPITAL FUND, LLC**, an Illinois limited liability company (the "Investor").

WHEREAS:

Subject to the terms and conditions set forth in this Agreement, the Company wishes to sell to the Investor, and the Investor wishes to buy from the Company, up to Twenty Million Dollars ($20,000,000) of the Company's common stock, $0.005 par value per share (the "Common Stock"). The shares of Common Stock to be purchased hereunder are referred to herein as the "Purchase Shares."

NOW THEREFORE, in consideration of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and the Investor hereby agree as follows:

1. CERTAIN DEFINITIONS.

For purposes of this Agreement, the following terms shall have the following meanings:

(a) "Accelerated Purchase Date" means, with respect to any Accelerated Purchase made pursuant to Section 2(b) hereof, the Business Day immediately following the applicable Purchase Date with respect to the corresponding Regular Purchase referred to in clause (i) of the second sentence of Section 2(b) hereof.

(b) "Accelerated Purchase Minimum Price Threshold" means, with respect to any Accelerated Purchase made pursuant to Section 2(b) hereof, the greater of (i) seventy-five percent (75%) of the Closing Sale Price of the Common Stock on the applicable Purchase Date with respect to the corresponding Regular Purchase referred to in clause (i) of the second sentence of Section 2(b) hereof and (ii) the minimum per share price threshold set forth in the applicable Accelerated Purchase Notice.

(c) "Accelerated Purchase Notice" means, with respect to an Accelerated Purchase made pursuant to Section 2(b) hereof, an irrevocable written notice from the Company to the Investor directing the Investor to purchase the number of Purchase Shares specified by the Company therein as the Accelerated Purchase Share Amount to be purchased by the Investor (such specified Accelerated Purchase Share Amount subject to adjustment in accordance with Section 2(b) hereof as necessary to give effect to the Purchase Share amount limitations applicable to such Accelerated Purchase Share Amount as set forth in this Agreement) at the applicable Accelerated Purchase Price on the applicable Accelerated Purchase Date for such Accelerated Purchase.

(d) "Accelerated Purchase Price" means, with respect to an Accelerated Purchase made pursuant to Section 2(b) hereof, ninety-five percent (95%) of the lower of (i) the VWAP for the period beginning at 9:30:01 a.m., Eastern time, on the applicable Accelerated Purchase Date, or such other time publicly announced by the Principal Market as the official open (or commencement) of trading on the Principal Market on such applicable Accelerated Purchase Date (the "Accelerated Purchase Commencement Time"), and ending at the earliest of (A) 4:00:00 p.m., Eastern time, on such applicable Accelerated Purchase Date, or such other time publicly announced by the Principal Market as the official close of trading on the Principal Market on such applicable Accelerated Purchase Date, (B) such time, from and after the Accelerated Purchase Commencement Time for such Accelerated Purchase, that the total number (or volume) of shares of Common Stock traded on the Principal Market has exceeded the applicable Accelerated Purchase Share Volume Maximum, and (C) such time, from and after the Accelerated Purchase Commencement Time for such Accelerated Purchase, that the Sale Price has fallen below the applicable Accelerated Purchase Minimum Price Threshold (such earliest of (i)(A), (i)(B) and (i)(C) above, the "Accelerated Purchase Termination Time"), and (ii) the Closing Sale Price of the Common Stock on such applicable Accelerated Purchase Date (to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction).

(e) "Accelerated Purchase Share Amount" means, with respect to an Accelerated Purchase made pursuant to Section 2(b) hereof, the number of Purchase Shares directed by the Company to be purchased by the Investor in an Accelerated Purchase Notice, which number of Purchase Shares shall not exceed the lesser of (i) 300% of the number of Purchase Shares directed by the Company to be purchased by the Investor pursuant to the corresponding Regular Purchase Notice for the corresponding Regular Purchase referred to in clause (i) of the second sentence of Section 2(b) hereof (subject to the Purchase Share limitations contained in Section 2(a) hereof) and (ii) an amount equal to (A) the Accelerated Purchase Share Percentage multiplied by (B) the total number (or volume) of shares of Common Stock traded on the Principal Market during the period on the applicable Accelerated Purchase Date beginning at the Accelerated Purchase Commencement Time for such Accelerated Purchase and ending at the Accelerated Purchase Termination Time for such Accelerated Purchase.

(f) "Accelerated Purchase Share Percentage" means, with respect to an Accelerated Purchase made pursuant to Section 2(b) hereof, thirty percent (30%).

(g) "Accelerated Purchase Share Volume Maximum" means, with respect to an Accelerated Purchase made pursuant to Section 2(b) hereof, a number of shares of Common Stock equal to (i) the number of Purchase Shares specified by the Company in the applicable Accelerated Purchase Notice as the Accelerated Purchase Share Amount to be purchased by the Investor in such Accelerated Purchase, divided by (ii) the Accelerated Purchase Share Percentage (to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction).

(h) "Additional Accelerated Purchase Date" means, with respect to an Additional Accelerated Purchase made pursuant to Section 2(c) hereof, the Business Day (i) that is the Accelerated Purchase Date with respect to the corresponding Accelerated Purchase referred to in clause (i) of the proviso in the second sentence of Section 2(c) hereof and (ii) on which the Investor receives, prior to 1:00 p.m., Eastern time, on such Business Day, a valid Additional Accelerated Purchase Notice for such Additional Accelerated Purchase in accordance with this Agreement.

(i) "Additional Accelerated Purchase Minimum Price Threshold" means, with respect to an Additional Accelerated Purchase made pursuant to Section 2(c) hereof, the greater of (i) seventy-five percent (75%) of the Closing Sale Price of the Common Stock on the Business Day immediately preceding the applicable Additional Accelerated Purchase Date with respect to such Additional Accelerated Purchase and (ii) the minimum per share price threshold set forth in the applicable Additional Accelerated Purchase Notice.

(j) "Additional Accelerated Purchase Notice" means, with respect to an Additional Accelerated Purchase made pursuant to Section 2(c) hereof, an irrevocable written notice from the Company to the Investor directing the Investor to purchase the number of Purchase Shares specified by the Company therein as the Additional Accelerated Purchase Share Amount to be purchased by the Investor (such specified Additional Accelerated Purchase Share Amount subject to adjustment in accordance with Section 2(c) hereof as necessary to give effect to the Purchase Share amount limitations applicable to such Additional Accelerated Purchase Share Amount as set forth in this Agreement) at the applicable Additional Accelerated Purchase Price on the applicable Additional Accelerated Purchase Date for such Additional Accelerated Purchase.

(k) "Additional Accelerated Purchase Price" means, with respect to an Additional Accelerated Purchase made pursuant to Section 2(c) hereof, ninety-five percent (95%) of the lower of (i) the VWAP for the period on the applicable Additional Accelerated Purchase Date, beginning at the latest of (A) the applicable Accelerated Purchase Termination Time with respect to the corresponding Accelerated Purchase referred to in clause (i) of the proviso in the second sentence of Section 2(c) hereof on such Additional Accelerated Purchase Date, (B) the applicable Additional Accelerated Purchase Termination Time with respect to the most recently completed prior Additional Accelerated Purchase on such Additional Accelerated Purchase Date, as applicable, and (C) the time at which all Purchase Shares subject to all prior Accelerated Purchases and Additional Accelerated Purchases (as applicable), including, without limitation, those that have been effected on the same Business Day as the applicable Additional Accelerated Purchase Date with respect to which the applicable Additional Accelerated Purchase relates, have theretofore been received by the Investor as DWAC Shares in accordance with this Agreement (such latest of (i)(A), (i)(B) and (i)(C) above, the "Additional Accelerated Purchase Commencement Time"), and ending at the earliest of (X) 4:00 p.m., Eastern time, on such Additional Accelerated Purchase Date, or such other time publicly announced by Principal Market as the official close of trading on the Principal Market on such Additional Accelerated Purchase Date, (Y) such time, from and after the Additional Accelerated Purchase Commencement Time for such Additional Accelerated Purchase, that total number (or volume) of shares of Common Stock traded on the Principal Market has exceeded the applicable Additional Accelerated Purchase Share Volume Maximum, and (Z) such time, from and after the Additional Accelerated Purchase Commencement Time for such Additional Accelerated Purchase, that the Sale Price has fallen below the applicable Additional Accelerated Purchase Minimum Price Threshold (such earliest of (i)(X), (i)(Y) and (i)(Z) above, the "Additional Accelerated Purchase Termination Time"), and (ii) the Closing Sale Price of the Common Stock on such Additional Accelerated Purchase Date (to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction).

(l) "Additional Accelerated Purchase Share Amount" means, with respect to an Additional Accelerated Purchase made pursuant to Section 2(c) hereof, the number of Purchase Shares directed by the Company to be purchased by the Investor on an Additional Accelerated Purchase Notice, which number of Purchase Shares shall not exceed the lesser of (i) 300% of the number of Purchase Shares directed by the Company to be purchased by the Investor pursuant to the corresponding Regular Purchase Notice for the corresponding Regular Purchase referred to in clause (i) of the proviso in the second sentence of Section 2(c) hereof (subject to the Purchase Share limitations contained in Section 2(a) hereof) and (ii) an amount equal to (A) the Additional Accelerated Purchase Share Percentage multiplied by (B) the total number (or volume) of shares of Common Stock traded on the Principal Market during the period on the applicable Additional Accelerated Purchase Date beginning at the Additional Accelerated Purchase Commencement Time for such Additional Accelerated Purchase and ending at the Additional Accelerated Purchase Termination Time for such Additional Accelerated Purchase.

(m) "Additional Accelerated Purchase Share Percentage" means, with respect to an Additional Accelerated Purchase made pursuant to Section 2(c) hereof, thirty percent (30%).

(n) "Additional Accelerated Purchase Share Volume Maximum" means, with respect to an Additional Accelerated Purchase made pursuant to Section 2(c) hereof, a number of shares of Common Stock equal to (i) the number of Purchase Shares specified by the Company in the applicable Additional Accelerated Purchase Notice as the Additional Accelerated Purchase Share Amount to be purchased by the Investor in such Additional Accelerated Purchase, divided by (ii) the Additional Accelerated Purchase Share Percentage (to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split, reverse stock split or other similar transaction).

(o) "Alternate Adjusted Regular Purchase Share Limit" means, with respect to a Regular Purchase made pursuant to Section 2(a) hereof, the maximum number of Purchase Shares which, taking into account the applicable per share Purchase Price therefor calculated in accordance with this Agreement, would enable the Company to deliver to the Investor, on the applicable Purchase Date for such Regular Purchase, a Regular Purchase Notice for a Purchase Amount equal to, or as closely approximating without exceeding, One Hundred Fifty Thousand Dollars ($150,000).

(p) "Available Amount" means, initially, Twenty Million Dollars ($20,000,000) in the aggregate, which amount shall be reduced by the Purchase Amount each time the Investor purchases shares of Common Stock pursuant to Section 2 hereof.

(q) "Bankruptcy Law" means Title 11, U.S. Code, or any similar federal or state law for the relief of debtors.

(r) "Business Day" means any day on which the Principal Market is open for trading, including any day on which the Principal Market is open for trading for a period of time less than the customary time.

(s) "Closing Sale Price" means, for any security as of any date, the last closing sale price for such security on the Principal Market as reported by the Principal Market.

(t) "Confidential Information" means any information disclosed by either party to the other party, either directly or indirectly, in writing, orally or by inspection of tangible objects (including, without limitation, documents, prototypes, samples, plant and equipment), which is designated as "Confidential," "Proprietary" or some similar designation. Information communicated orally shall be considered Confidential Information if such information is confirmed in writing as being Confidential Information within ten (10) Business Days after the initial disclosure. Confidential Information may also include information disclosed to a disclosing party by third parties. Confidential Information shall not, however, include any information which (i) was publicly known and made generally available in the public domain prior to the time of disclosure by the disclosing party; (ii) becomes publicly known and made generally available after disclosure by the disclosing party to the receiving party through no action or inaction of the receiving party; (iii) is already in the possession of the receiving party without confidential restriction at the time of disclosure by the disclosing party as shown by the receiving party's files and records immediately prior to the time of disclosure; (iv) is obtained by the receiving party from a third party without a breach of such third party's obligations of confidentiality; (v) is independently developed by the receiving party without use of or reference to the disclosing party's Confidential Information, as shown by documents and other competent evidence in the receiving party's possession; or (vi) is required by law to be disclosed by the receiving party, provided that the receiving party gives the disclosing party prompt written notice of such requirement prior to such disclosure and assistance in obtaining an order protecting the information from public disclosure.

(u) "Custodian" means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

(v) "DTC" means The Depository Trust Company, or any successor performing substantially the same function for the Company.

(w) "DWAC Shares" means shares of Common Stock that are (i) issued in electronic form, (ii) freely tradable and transferable and without restriction on resale and (iii) timely credited by the Company to the Investor's or its designee's specified Deposit/Withdrawal at Custodian (DWAC) account with DTC under its Fast Automated Securities Transfer (FAST) Program, or any similar program hereafter adopted by DTC performing substantially the same function.

(x) "Exchange Act" means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

(y) "Floor Price" means, with respect to a Regular Purchase made pursuant to Section 2(a) hereof, $1.00, which shall be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction and, effective upon the consummation of any such reorganization, recapitalization, non-cash dividend, stock split or other similar transaction, the Floor Price shall mean the lower of (i) the adjusted price and (ii) $1.00.

(z) "Fully Adjusted Regular Purchase Share Limit" means, with respect to any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction from and after the date of this Agreement, the Regular Purchase Share Limit (as defined in Section 2(a) hereof) in effect on the applicable date of determination, after giving effect to the full proportionate adjustment thereto made pursuant to Section 2(a) hereof for or in respect of such reorganization, recapitalization, non-cash dividend, stock split or other similar transaction.

(aa) "Material Adverse Effect" means any material adverse effect on (i) the enforceability of any Transaction Document, (ii) the results of operations, assets, business or financial condition of the Company and its Subsidiaries, taken as a whole, other than any material adverse effect that resulted primarily from (A) any change in the United States or foreign economies or securities or financial markets in general that does not have a disproportionate effect on the Company and its Subsidiaries, taken as a whole, (B) any change that generally affects the industry in which the Company and its Subsidiaries operate that does not have a disproportionate effect on the Company and its Subsidiaries, taken as a whole, (C) any change arising in connection with earthquakes, hostilities, acts of war, sabotage or terrorism or military actions or any escalation or material worsening of any such hostilities, acts of war, sabotage or terrorism or military actions existing as of the date hereof, (D) any action taken by the Investor, its affiliates or its or their successors and assigns with respect to the transactions contemplated by this Agreement, (E) the effect of any change in applicable laws or accounting rules that does not have a disproportionate effect on the Company and its Subsidiaries, taken as a whole, or (F) any change resulting from compliance with terms of this Agreement or the consummation of the transactions contemplated by this Agreement, or (iii) the Company's ability to perform in any material respect on a timely basis its obligations under any Transaction Document to be performed as of the date of determination.

(bb) "Maturity Date" means the first day of the month immediately following the thirty-six (36) month anniversary of the Commencement Date.

(cc) "PEA Period" means the period commencing at 9:30 a.m., Eastern time, on the fifth (5th) Business Day immediately prior to the filing of any post-effective amendment to the Registration Statement (as defined herein) or New Registration Statement (as such term is defined in the Registration Rights Agreement), and ending at 9:30 a.m., Eastern time, on the Business Day immediately following, the effective date of any post-effective amendment to the Registration Statement (as defined herein) or New Registration Statement (as such term is defined in the Registration Rights Agreement).

(dd) "Person" means an individual or entity including but not limited to any limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

(ee) "Principal Market" means the NYSE American (or any nationally recognized successor thereto); provided, however, that in the event the Company's Common Stock is ever listed or traded on The Nasdaq Capital Market, The Nasdaq Global Market, The Nasdaq Global Select Market, the New York Stock Exchange, the NYSE American, the NYSE Arca, the OTC Bulletin Board, or the OTCQX or the OTCQB operated by the OTC Markets Group, Inc. (or any nationally recognized successor to any of the foregoing), then the "Principal Market" shall mean such other market or exchange on which the Company's Common Stock is then listed or traded.

(ff) "Purchase Amount" means, with respect to any Regular Purchase, any Accelerated Purchase or any Additional Accelerated Purchase made hereunder, as applicable, the portion of the Available Amount to be purchased by the Investor pursuant to Section 2 hereof.

(gg) "Purchase Date" means, with respect to a Regular Purchase made pursuant to Section 2(a) hereof, the Business Day on which the Investor receives, after 4:00 p.m., Eastern time, but prior to 5:00 p.m., Eastern time, on such Business Day, a valid Regular Purchase Notice for such Regular Purchase in accordance with this Agreement.

(hh) "Purchase Price" means, with respect to any Regular Purchase made pursuant to Section 2(a) hereof, the lower of: (i) the lowest Sale Price on the applicable Purchase Date for such Regular Purchase and (ii) the arithmetic average of the three (3) lowest Closing Sale Prices for the Common Stock during the ten (10) consecutive Business Days ending on the Business Day immediately preceding such Purchase Date for such Regular Purchase (in each case, to be appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction that occurs on or after the date of this Agreement).

(ii) "Regular Purchase Notice" means, with respect to any Regular Purchase pursuant to Section 2(a) hereof, an irrevocable written notice from the Company to the Investor directing the Investor to buy such applicable amount of Purchase Shares at the applicable Purchase Price as specified by the Company therein on the applicable Purchase Date for such Regular Purchase.

(jj) "Sale Price" means any trade price for the shares of Common Stock on the Principal Market as reported by the Principal Market.

(kk) "SEC" means the U.S. Securities and Exchange Commission.

(ll) "Securities" means, collectively, the Purchase Shares and the Commitment Shares.

(mm) "Securities Act" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

(nn) "Subsidiary" means any Person the Company wholly-owns or controls, or in which the Company, directly or indirectly, owns a majority of the voting stock or similar voting interest, in each case that would be disclosable pursuant to Item 601(b)(21) of Regulation S-K promulgated under the Securities Act.

(oo) "Transaction Documents" means, collectively, this Agreement and the schedules and exhibits hereto, the Registration Rights Agreement and the schedules and exhibits thereto, and each of the other agreements, documents, certificates and instruments entered into or furnished by the parties hereto in connection with the transactions contemplated hereby and thereby.

(pp) "Transfer Agent" means American Stock Transfer & Trust Company, or such other Person who is then serving as the transfer agent for the Company in respect of the Common Stock.

(qq) "VWAP" means in respect of an Accelerated Purchase Date and an Additional Accelerated Purchase Date, as applicable, the volume weighted average price of the Common Stock on the Principal Market, as reported on the Principal Market.

2. PURCHASE OF COMMON STOCK.

Subject to the terms and conditions set forth in this Agreement, the Company has the right to sell to the Investor, and the Investor has the obligation to purchase from the Company, Purchase Shares as follows:

(a) Commencement of Regular Sales of Common Stock. Upon the satisfaction of all of the conditions set forth in Sections 7 and 8 hereof (the "Commencement" and the date of satisfaction of such conditions the "Commencement Date") and thereafter, the Company shall have the right, but not the obligation, to direct the Investor, by its delivery to the Investor of a Regular Purchase Notice from time to time, to purchase up to Sixty Thousand (60,000) Purchase Shares, subject to adjustment as set forth below in this Section 2(a) (such maximum number of Purchase Shares, as may be adjusted from time to time, the "Regular Purchase Share Limit"), at the Purchase Price on the Purchase Date (each such purchase a "Regular Purchase"); provided, however, that the Regular Purchase Share Limit shall be increased to: (i) Eighty Thousand (80,000) Purchase Shares, if the Closing Sale Price of the Common Stock on the applicable Purchase Date is not below $5.50, and (ii) One Hundred Twenty Thousand (120,000) Purchase Shares, if the Closing Sale Price of the Common Stock on the applicable Purchase Date is not below $7.00 (all of which share and dollar amounts shall be appropriately proportionately adjusted for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction; *provided* that if, after giving effect to the full proportionate adjustment to the Regular Purchase Share Limit therefor, the Fully Adjusted Regular Purchase Share Limit then in effect would preclude the Company from delivering to the Investor a Regular Purchase Notice hereunder for a Purchase Amount (calculated by multiplying (X) the number of Purchase Shares equal to the Fully Adjusted Regular Purchase Share Limit, by (Y) the Purchase Price per Purchase Share covered by such Regular Purchase Notice on the applicable Purchase Date therefor) equal to or greater than One Hundred Fifty Thousand Dollars ($150,000), the Regular Purchase Share Limit for such Regular Purchase Notice shall not be fully adjusted to equal the applicable Fully Adjusted Regular Purchase Share Limit, but rather the Regular Purchase Share Limit for such Regular Purchase Notice shall be adjusted to equal the applicable Alternate Adjusted Regular Purchase Share Limit as of the applicable Purchase Date for such Regular Purchase Notice); and provided, further, however, that the Investor's committed obligation under any single Regular Purchase, other than any Regular Purchase with respect to which an Alternate Adjusted Regular Purchase Share Limit shall apply, shall not exceed One Million Dollars ($1,000,000). If the Company delivers any Regular Purchase Notice for a Purchase Amount in excess of the limitations contained in the immediately preceding sentence, such Regular Purchase Notice shall be void *ab initio* to the extent of the amount by which the number of Purchase Shares set forth in such Regular Purchase Notice exceeds the number of Purchase Shares which the Company is permitted to include in such Purchase Notice in accordance herewith, and the Investor shall have no obligation to purchase such excess Purchase Shares in respect of such Regular Purchase Notice; provided, however, that the Investor shall remain obligated to purchase the number of Purchase Shares which the Company is permitted to include in such Regular Purchase Notice. The Company may deliver a Regular Purchase Notice to the Investor as often as every Business Day, so long as (i) the Closing Sale Price of the Common Stock on such Business Day is not less than the Floor Price and (ii) all Purchase Shares subject to all prior Regular Purchases have theretofore been received by the Investor as DWAC Shares in accordance with this Agreement. Notwithstanding the foregoing, the Company shall not deliver any Regular Purchase Notices to the Investor during the PEA Period.

(b) Accelerated Purchases. Subject to the terms and conditions of this Agreement, from and after the Commencement Date, in addition to purchases of Purchase Shares as described in Section 2(a) above, the Company shall also have the right, but not the obligation, to direct the Investor, by its delivery to the Investor of an Accelerated Purchase Notice from time to time in accordance with this Agreement, to purchase the applicable Accelerated Purchase Share Amount at the applicable Accelerated Purchase Price on the Accelerated Purchase Date therefor in accordance with this Agreement (each such purchase, an "Accelerated Purchase"). The Company may deliver an Accelerated Purchase Notice to the Investor only (i) on a Purchase Date on which the Company also properly submitted a Regular Purchase Notice providing for a Regular Purchase of a number of Purchase Shares not less than the Regular Purchase Share Limit then in effect on such Purchase Date in accordance with this Agreement (including, without limitation, giving effect to any automatic increase to the Regular Purchase Share Limit as a result of the Closing Sale Price of the Common Stock exceeding certain thresholds set forth in Section 2(a) above on such Purchase Date and any other adjustments to the Regular Purchase Share Limit, in each case pursuant to Section 2(a) above) and (ii) if all Purchase Shares subject to all Regular Purchases, Accelerated Purchases and Additional Accelerated Purchases prior to the Regular Purchase Date referred to in clause (i) hereof (as applicable) have theretofore been received by the Investor as DWAC Shares in accordance with this Agreement. If the Company delivers any Accelerated Purchase Notice directing the Investor to purchase an amount of Purchase Shares that exceeds the Accelerated Purchase Share Amount that the Company is then permitted to include in such Accelerated Purchase Notice, such Accelerated Purchase Notice shall be void *ab initio* to the extent of the amount by which the number of Purchase Shares set forth in such Accelerated Purchase Notice exceeds the Accelerated Purchase Share Amount that the Company is then permitted to include in such Accelerated Purchase Notice (which shall be confirmed in an Accelerated Purchase Confirmation), and the Investor shall have no obligation to purchase such excess Purchase Shares in respect of such Accelerated Purchase Notice; provided, however, that the Investor shall remain obligated to purchase the Accelerated Purchase Share Amount which the Company is permitted to include in such Accelerated Purchase Notice. Within one (1) Business Day after completion of each Accelerated Purchase Date for an Accelerated Purchase, the Investor will provide to the Company a written confirmation of such Accelerated Purchase setting forth the applicable Accelerated Purchase Share Amount and Accelerated Purchase Price for such Accelerated Purchase (each, an "Accelerated Purchase Confirmation"). Notwithstanding the foregoing, the Company shall not deliver any Accelerated Purchase Notices during the PEA Period.

(c) Additional Accelerated Purchases. Subject to the terms and conditions of this Agreement, from and after the Commencement Date, in addition to purchases of Purchase Shares as described in Section 2(a) and Section 2(b) above, the Company shall also have the right, but not the obligation, to direct the Investor, by its timely delivery to the Investor of an Additional Accelerated Purchase Notice on an Additional Accelerated Purchase Date in accordance with this Agreement, to purchase the applicable Additional Accelerated Purchase Share Amount at the applicable Additional Accelerated Purchase Price therefor in accordance with this Agreement (each such purchase, an "Additional Accelerated Purchase"). The Company may deliver multiple Additional Accelerated Purchase Notices to the Investor on an Additional Accelerated Purchase Date; provided, however, that the Company may deliver an Additional Accelerated Purchase Notice to the Investor only (i) on a Business Day that is also the Accelerated Purchase Date for an Accelerated Purchase with respect to which the Company properly submitted to the Investor an Accelerated Purchase Notice in accordance with this Agreement on the applicable Purchase Date for a Regular Purchase of a number of Purchase Shares not less than the Regular Purchase Share Limit then in effect in accordance with this Agreement (including, without limitation, giving effect to any automatic increase to the Regular Purchase Share Limit as a result of the Closing Sale Price of the Common Stock exceeding certain thresholds set forth in Section 2(a) above on such Purchase Date and any other adjustments to the Regular Purchase Share Limit, in each case pursuant to Section 2(a) above), and (ii) if all Purchase Shares subject to all prior Regular Purchases, Accelerated Purchases and Additional Accelerated Purchases, including, without limitation, those that have been effected on the same Business Day as the applicable Additional Accelerated Purchase Date with respect to which the applicable Additional Accelerated Purchase relates, in each case have theretofore been received by the Investor as DWAC Shares in accordance with this Agreement. If the Company delivers any Additional Accelerated Purchase Notice directing the Investor to purchase an amount of Purchase Shares that exceeds the Additional Accelerated Purchase Share Amount that the Company is then permitted to include in such Additional Accelerated Purchase Notice, such Additional Accelerated Purchase Notice shall be void *ab initio* to the extent of the amount by which the number of Purchase Shares set forth in such Additional Accelerated Purchase Notice exceeds the Additional Accelerated Purchase Share Amount that the Company is then permitted to include in such Additional Accelerated Purchase Notice (which shall be confirmed in an Additional Accelerated Purchase Confirmation), and the Investor shall have no obligation to purchase such excess Purchase Shares in respect of such Additional Accelerated Purchase Notice; provided, however, that the Investor shall remain obligated to purchase the Additional Accelerated Purchase Share Amount which the Company is permitted to include in such Additional Accelerated Purchase Notice. Within one (1) Business Day after completion of each Additional Accelerated Purchase Date, the Investor will provide to the Company a written confirmation of each Additional Accelerated Purchase on such Additional Accelerated Purchase Date setting forth the applicable Additional Accelerated Purchase Share Amount and Additional Accelerated Purchase Price for each such Additional Accelerated Purchase on such Additional Accelerated Purchase Date (each, an "Additional Accelerated Purchase Confirmation"). Notwithstanding the foregoing, the Company shall not deliver any Additional Accelerated Purchase Notices during the PEA Period.

(d) Payment for Purchase Shares. For each Regular Purchase, the Investor shall pay to the Company an amount equal to the Purchase Amount with respect to such Regular Purchase as full payment for such Purchase Shares via wire transfer of immediately available funds on the same Business Day that the Investor receives such Purchase Shares, if such Purchase Shares are received by the Investor before 1:00 p.m., Eastern time, or, if such Purchase Shares are received by the Investor after 1:00 p.m., Eastern time, the next Business Day. For each Accelerated Purchase and each Additional Accelerated Purchase, the Investor shall pay to the Company an amount equal to the Purchase Amount with respect to such Accelerated Purchase and Additional Accelerated Purchase, respectively, as full payment for such Purchase Shares via wire transfer of immediately available funds on the second Business Day following the date that the Investor receives such Purchase Shares. If the Company or the Transfer Agent shall fail for any reason or for no reason to electronically transfer any Purchase Shares as DWAC Shares in respect of a Regular Purchase, an Accelerated Purchase or an Additional Accelerated Purchase (as applicable) within two (2) Business Days following the receipt by the Company of the Purchase Price, Accelerated Purchase Price and Additional Accelerated Purchase Price, respectively, therefor in compliance with this Section 2(d), and if on or after such Business Day the Investor purchases (in an open market transaction or otherwise) shares of Common Stock to deliver in satisfaction of a sale by the Investor of such Purchase Shares that the Investor anticipated receiving from the Company in respect of such Regular Purchase, Accelerated Purchase or Additional Accelerated Purchase (as applicable), then the Company shall, within two (2) Business Days after the Investor's request, either (i) pay cash to the Investor in an amount equal to the Investor's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased (the "Cover Price"), at which point the Company's obligation to deliver such Purchase Shares as DWAC Shares shall terminate, or (ii) promptly honor its obligation to deliver to the Investor such Purchase Shares as DWAC Shares and pay cash to the Investor in an amount equal to the excess (if any) of the Cover Price over the total Purchase Amount paid by the Investor pursuant to this Agreement for all of the Purchase Shares to be purchased by the Investor in connection with such Regular Purchase, Accelerated Purchase and Additional Accelerated Purchase (as applicable). The Company shall not issue any fraction of a share of Common Stock upon any Regular Purchase, Accelerated Purchase or Additional Accelerated Purchase. If the issuance would result in the issuance of a fraction of a share of Common Stock, the Company shall round such fraction of a share of Common Stock up or down to the nearest whole share. All payments made under this Agreement shall be made in lawful money of the United States of America or wire transfer of immediately available funds to such account as the Company may from time to time designate by written notice in accordance with the provisions of this Agreement. Whenever any amount expressed to be due by the terms of this Agreement is due on any day that is not a Business Day, the same shall instead be due on the next succeeding day that is a Business Day.

(e) Compliance with Rules of Principal Market.

(i) Exchange Cap. Subject to Section 2(e)(ii) below, the Company shall not issue or sell any shares of Common Stock pursuant to this Agreement, and the Investor shall not purchase or acquire any shares of Common Stock pursuant to this Agreement, to the extent that after giving effect thereto, the aggregate number of shares of Common Stock that would be issued pursuant to this Agreement and the transactions contemplated hereby would exceed 8,298,680 (representing 19.99% of the shares of Common Stock issued and outstanding immediately prior to the execution of this Agreement), which number of shares shall be (i) reduced, on a share-for-share basis, by the number of shares of Common Stock issued or issuable pursuant to any transaction or series of transactions that may be aggregated with the transactions contemplated by this Agreement under applicable rules of the Principal Market and (ii) appropriately adjusted for any reorganization, recapitalization, non-cash dividend, stock split or other similar transaction that occurs after the date of this Agreement (such maximum number of shares, the "Exchange Cap"), unless and until the Company elects to solicit stockholder approval of the issuance of Common Stock as contemplated by this Agreement, and the stockholders of the Company have in fact approved the issuance of Common Stock as contemplated by this Agreement in accordance with the applicable rules of the Principal Market. For the avoidance of doubt, the Company may, but shall be under no obligation to, request its stockholders to approve the issuance of Common Stock as contemplated by this Agreement; provided, that if stockholder approval is not obtained in accordance with this Section 2(e)(i), the Exchange Cap shall be applicable for all purposes of this Agreement and the transactions contemplated hereby at all times during the term of this Agreement (except as set forth in Section 2(e)(ii) below).

(ii) At-Market Transaction. Notwithstanding Section 2(e)(i) above, the Exchange Cap shall not be applicable to issuances and sales of Common Stock pursuant to this Agreement to the extent such issuances and sales are made at a price equal to or in excess of the Base Price. For purposes of this Agreement, "Base Price" shall mean a price per Purchase Share equal to the sum of (i) the Minimum Price and (ii) $0.039; "Minimum Price" shall mean the lower of: (i) the Official Closing Price immediately preceding the delivery by the Company of a Regular Purchase Notice, an Accelerated Purchase Notice or an Additional Accelerated Purchase Notice under this Agreement and (ii) the average Official Closing Price for the five (5) consecutive Trading Days immediately preceding the delivery by the Company of a Regular Purchase Notice, an Accelerated Purchase Notice or an Additional Accelerated Purchase Notice under this Agreement; and "Official Closing Price" shall mean the official closing price on the Principal Market as reported to the Consolidated Tape immediately preceding the delivery by the Company of a Regular Purchase Notice, an Accelerated Purchase Notice or an Additional Accelerated Purchase Notice under this Agreement.

(iii) General. The Company shall not issue any shares of Common Stock pursuant to this Agreement if such issuance would reasonably be expected to result in (A) a violation of the Securities Act or (B) a breach of the rules and regulations of the Principal Market. The provisions of this Section 2(e) shall be implemented in a manner otherwise than in strict conformity with the terms hereof only if necessary to ensure compliance with the Securities Act and the rules and regulations of the Principal Market.

(f) Beneficial Ownership Limitation. Notwithstanding anything to the contrary contained in this Agreement, the Company shall not issue or sell, and the Investor shall not purchase or acquire, any shares of Common Stock under this Agreement which, when aggregated with all other shares of Common Stock then beneficially owned by the Investor and its affiliates (as calculated pursuant to Section 13(d) of the Exchange Act and Rule 13d-3 promulgated thereunder), would result in the beneficial ownership by the Investor of more than 4.99% of the outstanding shares of Common Stock (the "Beneficial Ownership Limitation"). Upon the written or oral request of the Investor, the Company shall promptly (but not later than 24 hours) confirm orally or in writing to the Investor the number of shares of Common Stock then outstanding. The Investor and the Company shall each cooperate in good faith in the determinations required hereby and the application hereof. The Investor's written certification to the Company of the applicability of the Beneficial Ownership Limitation, and the resulting effect thereof hereunder at any time, shall be conclusive with respect to the applicability thereof and such result absent manifest error.

3. INVESTOR'S REPRESENTATIONS AND WARRANTIES.

The Investor represents and warrants to the Company that as of the date hereof and as of the Commencement Date:

(a) Investment Purpose. The Investor is acquiring the Securities as principal for its own account and not with a view to or for distributing or reselling such Securities or any part thereof in violation of the Securities Act or any applicable state securities law, has no present intention of distributing any of such Securities in violation of the Securities Act or any applicable state securities law and has no direct or indirect arrangement or understandings with any other Persons to distribute or regarding the distribution of such Securities in violation of the Securities Act or any applicable state securities law (this representation and warranty not limiting the Investor's right to sell the Securities at any time pursuant to the Registration Statement described herein or otherwise in compliance with applicable federal and state securities laws). The Investor is acquiring the Securities hereunder in the ordinary course of its business.

(b) Accredited Investor Status. The Investor is an "accredited investor" as that term is defined in Rule 501(a)(3) of Regulation D promulgated under the Securities Act.

(c) Reliance on Exemptions. The Investor understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and the Investor's compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Investor set forth herein in order to determine the availability of such exemptions and the eligibility of the Investor to acquire the Securities.

(d) Information. The Investor understands that its investment in the Securities involves a high degree of risk. The Investor (i) is able to bear the economic risk of an investment in the Securities including a total loss thereof, (ii) has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of the proposed investment in the Securities and (iii) has had an opportunity to ask questions of and receive answers from the officers of the Company concerning the financial condition and business of the Company and others matters related to an investment in the Securities. Neither such inquiries nor any other due diligence investigations conducted by the Investor or its representatives shall modify, amend or affect the Investor's right to rely on the Company's representations and warranties contained in Section 4 below. The Investor has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities. The Investor understands that it (and not the Company) shall be responsible for its own tax liabilities that may arise as a result of this investment or the transactions contemplated by this Agreement.

(e) No Governmental Review. The Investor understands that no U.S. federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of an investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

(f) Transfer or Sale. The Investor understands that (i) the Securities may not be offered for sale, sold, assigned or transferred unless (A) registered pursuant to the Securities Act or (B) an exemption exists permitting such Securities to be sold, assigned or transferred without such registration; (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144 and further, if Rule 144 is not applicable, any resale of the Securities under circumstances in which the seller (or the Person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the Securities Act) may require compliance with some other exemption under the Securities Act or the rules and regulations of the SEC thereunder.

(g) Validity; Enforcement. This Agreement has been duly and validly authorized, executed and delivered on behalf of the Investor and is a valid and binding agreement of the Investor enforceable against the Investor in accordance with its terms, subject as to enforceability to general principles of equity and to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies.

(h) Residency. The Investor is a resident of the State of Illinois.

(i) No Short Selling. The Investor represents and warrants to the Company that at no time prior to the date of this Agreement has any of the Investor, its agents, representatives or affiliates engaged in or effected, in any manner whatsoever, directly or indirectly, any (i) "short sale" (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of the Common Stock or (ii) hedging transaction, which establishes a net short position with respect to the Common Stock.

4. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company represents and warrants to the Investor that, except as set forth in the disclosure schedules attached hereto, which exceptions shall be deemed to be a part of the representations and warranties made hereunder, as of the date hereof and as of the Commencement Date:

(a) Organization and Qualification. The Company and each of its Subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization, with the requisite corporate power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any of its Subsidiaries is in violation or default of any of the provisions of its respective certificate or articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and its Subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in a Material Adverse Effect and no proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification. The Company has no Subsidiaries required to be disclosed pursuant to Item 601(b)(21)(ii) of Regulation S-K, except as set forth in the Company's Registration Statement on Form S-4 (File No. 333-249249), as amended (the "Form S-4").

(b) Authorization; Enforcement; Validity. (i) The Company has the requisite corporate power and authority to enter into and perform its obligations under this Agreement, the Registration Rights Agreement and each of the other Transaction Documents, and to issue the Securities in accordance with the terms hereof and thereof, (ii) the execution and delivery of the Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby, including without limitation, the issuance of the Commitment Shares (as defined below in Section 5(e)) and the reservation for issuance and the issuance of the Purchase Shares issuable under this Agreement, have been duly authorized by the Company's Board of Directors and no further consent or authorization is required by the Company, its Board of Directors or its stockholders (except as provided in this Agreement), (iii) each of this Agreement and the Registration Rights Agreement has been, and each other Transaction Document shall be on the Commencement Date, duly executed and delivered by the Company and (iv) each of this Agreement and the Registration Rights Agreement constitutes, and each other Transaction Document upon its execution on behalf of the Company, shall constitute, the valid and binding obligations of the Company enforceable against the Company in accordance with their terms, except as such enforceability may be limited by general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of creditors' rights and remedies. The Board of Directors of the Company has approved the resolutions (the "Signing Resolutions") substantially in the form as set forth as Exhibit C attached hereto to authorize this Agreement, the Registration Rights Agreement and the transactions contemplated hereby. The Signing Resolutions are valid, in full force and effect and have not been modified or supplemented in any respect. The Company has delivered to the Investor a true and correct copy of minutes of a meeting of the Board of Directors of the Company at which the Signing Resolutions were duly adopted by the Board of Directors or a unanimous written consent adopting the Signing Resolutions executed by all of the members of the Board of Directors of the Company. Except as set forth in this Agreement, no other approvals or consents of the Company's Board of Directors, any authorized committee thereof, or stockholders (except as provided in this Agreement) is necessary under applicable laws and the Company's Certificate of Incorporation or Bylaws to authorize the execution and delivery of the Transaction Documents or any of the transactions contemplated thereby, including, but not limited to, the issuance of the Commitment Shares and the issuance of the Purchase Shares.

(c) Capitalization. As of the date hereof, the authorized capital stock of the Company is set forth in the Company's Registration Statement on Form S-4 (333-249249) (the "Form S-4"). Except as disclosed in the Form S-4, (i) no shares of the Company's capital stock are subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company, (ii) there are no outstanding debt securities, (iii) there are no outstanding options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or any of its Subsidiaries, or contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to issue additional shares of capital stock of the Company or any of its Subsidiaries or options, warrants, scrip, rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities or rights convertible into, any shares of capital stock of the Company or any of its Subsidiaries, (iv) there are no agreements or arrangements under which the Company or any of its Subsidiaries is obligated to register the sale of any of their securities under the Securities Act (except the Registration Rights Agreement), (v) there are no outstanding securities or instruments of the Company or any of its Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any of its Subsidiaries is or may become bound to redeem a security of the Company or any of its Subsidiaries, (vi) there are no securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Securities as described in this Agreement and (vii) the Company does not have any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement. Attached as exhibits to the Form S-4 (or incorporated by reference as exhibits thereto), are true and correct copies of the Company's Certificate of Incorporation, as amended and as in effect on the date hereof (the "Certificate of Incorporation"), and the Company's Bylaws, as amended and as in effect on the date hereof (the "Bylaws"), and summaries of the material terms of all securities convertible into or exercisable for Common Stock, if any, and copies of any documents containing the material rights of the holders thereof in respect thereto that, in either case, are not disclosed in the Form S-4 or filed as exhibits thereto (including exhibits incorporated by reference thereto) have been provided to the Investor.

(d) Issuance of Securities. Upon issuance and payment therefor in accordance with the terms and conditions of this Agreement, the Purchase Shares shall be validly issued, fully paid and nonassessable and free from all taxes, liens, charges, restrictions, rights of first refusal and preemptive rights with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. Upon issuance in accordance with the terms and conditions of this Agreement, the issuance of the Commitment Shares (as defined below in Section 5(e)) and the reservation for issuance and the issuance of the Purchase Shares issuable under this Agreement, shall be validly issued, fully paid and nonassessable and free from all taxes, liens, charges, restrictions, rights of first refusal and preemptive rights with respect to the issue thereof, with the holders being entitled to all rights accorded to a holder of Common Stock.

(e) No Conflicts. The execution, delivery and performance of the Transaction Documents by the Company and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the reservation for issuance and issuance of the Purchase Shares and the Commitment Shares) will not (i) result in a violation of the Certificate of Incorporation, any Certificate of Designations, Preferences and Rights of any outstanding series of preferred stock of the Company or the Bylaws or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company or any of its Subsidiaries is a party, or result in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations and the rules and regulations of the Principal Market applicable to the Company or any of its Subsidiaries) or by which any property or asset of the Company or any of its Subsidiaries is bound or affected, except in the case of conflicts, defaults, terminations, amendments, accelerations, cancellations and violations under clause (ii), which could not reasonably be expected to result in a Material Adverse Effect. Neither the Company nor its Subsidiaries is in violation of any term of or in default under its Certificate of Incorporation, any Certificate of Designation, Preferences and Rights of any outstanding series of preferred stock of the Company or Bylaws or their organizational charter or bylaws, respectively, in any material respect. Neither the Company nor any of its Subsidiaries is in violation of any term of or is in default under any material contract, agreement, mortgage, indebtedness, indenture, instrument, judgment, decree or order or any statute, rule or regulation applicable to the Company or its Subsidiaries, except for possible conflicts, defaults, terminations or amendments that could not reasonably be expected to have a Material Adverse Effect. Except as specifically contemplated by this Agreement and as required under the Securities Act or applicable state securities laws and the rules and regulations of the Principal Market, the Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court or governmental agency or any regulatory or self-regulatory agency in order for it to execute, deliver or perform any of its obligations under or contemplated by the Transaction Documents in accordance with the terms hereof or thereof. Except as set forth elsewhere in this Agreement, all consents, authorizations, orders, filings and registrations which the Company is required to obtain pursuant to the preceding sentence shall be obtained or effected on or prior to the Commencement Date.

(f) SEC Documents; Financial Statements. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by the Company under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the twelve months preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "SEC Documents") on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Documents prior to the expiration of any such extension. As of their respective dates, the SEC Documents complied in all material respects with the requirements of the Securities Act and the Exchange Act, as applicable. None of the SEC Documents, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The financial statements of the Company included in the SEC Documents complied in all material respects with applicable accounting requirements and the rules and regulations of the SEC with respect thereto as in effect at the time of filing. Such financial statements were prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved ("GAAP"), except as may have been otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not have contained all footnotes required by GAAP, and fairly presented in all material respects the financial position of the Company and its consolidated Subsidiaries as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments. Except as set forth in the SEC Documents, as is publicly available on the SEC's Electronic Data Gathering, Analysis and Retrieval (EDGAR) System, and with respect to the Form S-4, the Company has received no notices or correspondence from the SEC during the one year preceding the date hereof**.** The SEC has not commenced any enforcement proceedings against the Company or any of its Subsidiaries.

(g) Absence of Certain Changes. Except as disclosed in the SEC Documents, since December 31, 2019, there has been no material adverse change in the business, properties, operations, financial condition or results of operations of the Company or its Subsidiaries. The Company has not taken any steps, and does not currently expect to take any steps, to seek protection pursuant to any Bankruptcy Law nor does the Company or any of its Subsidiaries have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy or insolvency proceedings. The Company is financially solvent and is generally able to pay its debts as they become due.

(h) Absence of Litigation. There is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company or any of its Subsidiaries, threatened against or affecting the Company, the Common Stock or any of the Company's or its Subsidiaries' officers or directors in their capacities as such, which could reasonably be expected to have a Material Adverse Effect.

(i) Acknowledgment Regarding Investor's Status. The Company acknowledges and agrees that the Investor is acting solely in the capacity of arm's length purchaser with respect to the Transaction Documents and the transactions contemplated hereby and thereby. The Company further acknowledges that the Investor is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated hereby and thereby and any advice given by the Investor or any of its representatives or agents in connection with the Transaction Documents and the transactions contemplated hereby and thereby is merely incidental to the Investor's purchase of the Securities. The Company further represents to the Investor that the Company's decision to enter into the Transaction Documents has been based solely on the independent evaluation by the Company and its representatives and advisors.

(j) No General Solicitation; No Integrated Offering. Neither the Company, nor any of its affiliates, nor any Person acting on its or their behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D under the Securities Act) in connection with the offer or sale of the Securities. Neither the Company, nor any of its affiliates, nor any Person acting on their behalf has, directly or indirectly, made any offers or sales of any security or solicited any offers to buy any security, under circumstances that would require registration of the offer and sale of any of the Securities under the Securities Act, whether through integration with prior offerings or otherwise, or cause this offering of the Securities to be integrated with prior offerings by the Company in a manner that would require stockholder approval pursuant to the rules of the Principal Market on which any of the securities of the Company are listed or designated. The issuance and sale of the Securities hereunder does not contravene the rules and regulations of the Principal Market.

(k) Intellectual Property Rights. The Company and its Subsidiaries own or possess adequate rights or licenses to use all material trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and rights necessary to conduct their respective businesses as now conducted. None of the Company's material trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, government authorizations, trade secrets or other intellectual property rights have expired or terminated, or, by the terms and conditions thereof, could expire or terminate within two years from the date of this Agreement. The Company and its Subsidiaries do not have any knowledge of any infringement by the Company or its Subsidiaries of any material trademark, trade name rights, patents, patent rights, copyrights, inventions, licenses, service names, service marks, service mark registrations, trade secret or other similar rights of others, or of any such development of similar or identical trade secrets or technical information by others, and there is no claim, action or proceeding being made or brought against, or to the Company's knowledge, being threatened against, the Company or its Subsidiaries regarding trademark, trade name, patents, patent rights, invention, copyright, license, service names, service marks, service mark registrations, trade secret or other infringement, which could reasonably be expected to have a Material Adverse Effect.

(l) Environmental Laws. The Company and its Subsidiaries (i) are in compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants ("Environmental Laws"), (ii) have received all permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in compliance with all terms and conditions of any such permit, license or approval, except where, in each of the three foregoing clauses, the failure to so comply could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(m) Title. Except as set forth in the SEC Documents, the Company and its Subsidiaries have good and marketable title in fee simple to all real property owned by them and good and marketable title in all personal property owned by them that is material to the business of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances and defects ("Liens") and, except for Liens as do not materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and its Subsidiaries and Liens for the payment of federal, state or other taxes, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company and its Subsidiaries are held by them under valid, subsisting and enforceable leases with which the Company and its Subsidiaries are in compliance with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiaries.

(n) Insurance. The Company and each of its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be prudent and customary in the businesses in which the Company and its Subsidiaries are engaged. Neither the Company nor any such Subsidiary has been refused any insurance coverage sought or applied for and neither the Company nor any such Subsidiary has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that would not materially and adversely affect the condition, financial or otherwise, or the earnings, business or operations of the Company and its Subsidiaries, taken as a whole.

(o) Regulatory Permits. The Company and its Subsidiaries possess all material certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses, and neither the Company nor any such Subsidiary has received any notice of proceedings relating to the revocation or modification of any such certificate, authorization or permit.

(p) Tax Status. The Company and each of its Subsidiaries has made or filed all federal and state income and all other material tax returns, reports and declarations required by any jurisdiction to which it is subject (unless and only to the extent that the Company and each of its Subsidiaries has set aside on its books provisions reasonably adequate for the payment of all unpaid and unreported taxes) and has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations, except those being contested in good faith and has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim.

(q) Transactions With Affiliates. Except as set forth in the SEC Documents, none of the officers or directors of the Company and, to the knowledge of the Company, none of the employees of the Company is presently a party to any transaction with the Company or any Subsidiary (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee or partner, in each case in excess of $120,000 other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including stock option agreements under any stock option plan of the Company.

(r) Application of Takeover Protections. The Company and its board of directors have taken or will take prior to the Commencement Date all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Certificate of Incorporation or the laws of the state of its incorporation which is or could become applicable to the Investor as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and the Investor's ownership of the Securities.

(s) Disclosure. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents that will be timely publicly disclosed by the Company, the Company confirms that neither it nor any other Person authorized to act on its behalf has provided the Investor or its agents or counsel with any information that it believes constitutes or might constitute material, non-public information which is not otherwise disclosed in the Registration Statement or the SEC Documents. The Company understands and confirms that the Investor will rely on the foregoing representation in effecting purchases and sales of securities of the Company. All of the disclosure furnished by or on behalf of the Company by a Person authorized by the Company to the Investor regarding the Company, its business and the transactions contemplated hereby is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading. The press releases disseminated by the Company during the twelve months preceding the date of this Agreement taken as a whole do not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in light of the circumstances under which they were made and when made, not misleading. The Company acknowledges and agrees that the Investor neither makes nor has made any representations or warranties with respect to the transactions contemplated hereby other than those specifically set forth in Section 3 hereof.

(t) Foreign Corrupt Practices. Neither the Company, nor to the knowledge of the Company, any agent or other Person acting on behalf of the Company, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company (or made by any Person acting on its behalf of which the Company is aware) which is in violation of law, or (iv) violated in any material respect any provision of the Foreign Corrupt Practices Act of 1977, as amended.

(u) DTC Eligibility. The Company, through the Transfer Agent, currently participates in the DTC Fast Automated Securities Transfer (FAST) Program and the Common Stock can be transferred electronically to third parties via the DTC Fast Automated Securities Transfer (FAST) Program.

(v) Sarbanes-Oxley. The Company is in compliance in all material respects with all provisions of the Sarbanes-Oxley Act of 2002, as amended, which are applicable to it as of the date hereof.

(w) Certain Fees. No brokerage or finder's fees or commissions are or will be payable by the Company to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Investor shall have no obligation with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section 4(w) that may be due in connection with the transactions contemplated by the Transaction Documents.

(x) Investment Company. The Company is not, and immediately after receipt of payment for the Securities will not be, an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

(y) Listing and Maintenance Requirements. The Common Stock is registered pursuant to Section 12(b) of the Exchange Act, and the Company has taken no action designed to, or which to its knowledge is likely to have the effect of, terminating the registration of the Common Stock pursuant to the Exchange Act nor has the Company received any notification that the SEC is currently contemplating terminating such registration. Except as disclosed in the SEC Documents, the Company has not, in the twelve (12) months preceding the date hereof, received any notice from any Person to the effect that the Company is not in compliance with the listing or maintenance requirements of the Principal Market. Except as disclosed in the SEC Documents, the Company is, and has no reason to believe that it will not in the foreseeable future continue to be, in compliance with all such listing and maintenance requirements.

(z) Accountants. The Company's accountants are set forth in the SEC Documents and, to the knowledge of the Company, such accountants are an independent registered public accounting firm as required by the Securities Act.

(aa) No Market Manipulation. The Company has not, and to its knowledge no Person acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or, paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company.

(bb) Shell Company Status. The Company is not currently, and to its knowledge has never been, an issuer identified in Rule 144(i)(1) under the Securities Act.

(cc) No Disqualification Events. None of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering contemplated hereby, any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the Securities Act) connected with the Company in any capacity at the time of sale (each, an "Issuer Covered Person") is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the Securities Act (a "Disqualification Event"), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3) under the Securities Act. The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event.

5. COVENANTS.

(a) Filing of Current Report and Registration Statement. The Company agrees that it shall, within the time required under the Exchange Act, file with the SEC a report on Form 8-K relating to the transactions contemplated by, and describing the material terms and conditions of, the Transaction Documents (the "Current Report"). The Company shall also file with the SEC, within twenty (20) days from the date hereof, a new registration statement (the "Registration Statement") covering only the resale of the Purchase Shares and all of the Commitment Shares, in accordance with the terms of the Registration Rights Agreement between the Company and the Investor, dated as of the date hereof (the "Registration Rights Agreement"). The Company shall permit the Investor to review and comment upon the final pre-filing draft version of the Current Report at least two (2) Business Days prior to its filing with the SEC, and the Company shall give due consideration to all such comments. The Investor shall use its reasonable best efforts to comment upon the final pre-filing draft version of the Current Report within one (1) Business Day from the date the Investor receives it from the Company.

(b) Blue Sky. The Company shall take all such action, if any, as is reasonably necessary, at such time as required under applicable state securities or "Blue Sky" laws, in order to obtain an exemption for or to register or qualify (i) the issuance of the Commitment Shares and the sale of the Purchase Shares to the Investor under this Agreement and (ii) any subsequent resale of all Commitment Shares and all Purchase Shares by the Investor, in each case, under applicable securities or "Blue Sky" laws of the states of the United States in such states as is reasonably requested by the Investor from time to time, and shall provide evidence of any such action so taken to the Investor.

(c) Listing/DTC. The Company shall take all action necessary to promptly secure the listing of all of the Purchase Shares and Commitment Shares to be issued to the Investor hereunder on the Principal Market at or prior to Commencement (subject to official notice of issuance) and upon each other national securities exchange or automated quotation system, if any, upon which the Common Stock is then listed, and shall use commercially reasonable efforts to maintain, so long as any shares of Common Stock shall be so listed, such listing of all such Securities from time to time issuable hereunder. From and after Commencement, the Company shall use commercially reasonable efforts to maintain the listing of the Common Stock on the Principal Market and shall comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules and regulations of the Principal Market. Neither the Company nor any of its Subsidiaries shall take any action that would reasonably be expected to result in the delisting or suspension of the Common Stock on the Principal Market. The Company shall promptly, and in no event later than the following Business Day, provide to the Investor copies of any notices it receives from any Person regarding the continued eligibility of the Common Stock for listing on the Principal Market; provided, however, that the Company shall not be required to provide the Investor copies of any such notice that the Company reasonably believes constitutes material non-public information and the Company would not be required to publicly disclose such notice in any report or statement filed with the SEC and under the Exchange Act or the Securities Act. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section 5(c). The Company shall take all action necessary to ensure that its Common Stock can be transferred electronically as DWAC Shares.

(d) Prohibition of Short Sales and Hedging Transactions. The Investor agrees that beginning on the date of this Agreement and ending on the date of termination of this Agreement as provided in Section 11, the Investor and its agents, representatives and affiliates shall not in any manner whatsoever enter into or effect, directly or indirectly, any (i) "short sale" (as such term is defined in Rule 200 of Regulation SHO of the Exchange Act) of the Common Stock or (ii) hedging transaction, which establishes a net short position with respect to the Common Stock.

(e) Issuance of Commitment Shares. In consideration for the Investor's execution and delivery of this Agreement, the Company shall cause to be issued to the Investor a total of 56,041 shares of Common Stock (the "Commitment Shares") immediately upon the execution of this Agreement and shall deliver to the Transfer Agent the Irrevocable Transfer Agent Instructions with respect to the issuance of such Commitment Shares. For the avoidance of doubt, all of the Commitment Shares shall be fully earned as of the date of this Agreement, whether or not the Commencement shall occur or any Purchase Shares are purchased by the Investor under this Agreement and irrespective of any subsequent termination of this Agreement.

(f) Due Diligence; Non-Public Information. The Investor shall have the right, from time to time as the Investor may reasonably deem appropriate and upon reasonable advance notice to the Company, to perform reasonable due diligence on the Company during normal business hours. The Company and its officers and employees shall provide information and reasonably cooperate with the Investor in connection with any reasonable request by the Investor related to the Investor's due diligence of the Company. Each party hereto agrees not to disclose any Confidential Information of the other party to any third party and shall not use the Confidential Information for any purpose other than in connection with, or in furtherance of, the transactions contemplated hereby. Each party hereto acknowledges that the Confidential Information shall remain the property of the disclosing party and agrees that it shall take all reasonable measures to protect the secrecy of any Confidential Information disclosed by the other party. The Company confirms that neither it nor any other Person acting on its behalf shall provide the Investor or its agents or counsel with any information that constitutes or might constitute material, non-public information, unless a simultaneous public announcement thereof is made by the Company in the manner contemplated by Regulation FD. In the event of a breach of the foregoing covenant by the Company or any Person acting on its behalf (as determined in the reasonable good faith judgment of the Investor), in addition to any other remedy provided herein or in the other Transaction Documents, if the Investor is holding any Securities at the time of the disclosure of material, non-public information, the Investor shall have the right to make a public disclosure, in the form of a press release, public advertisement or otherwise, of such material, non-public information without the prior approval by the Company; provided the Investor shall have first provided notice to the Company that it believes it has received information that constitutes material, non-public information, the Company shall have at least 24 hours to publicly disclose such material, non-public information prior to any such disclosure by the Investor, the Company shall have failed to demonstrate to the Investor in writing within such time period that such information does not constitute material, non-public information, and the Company shall have failed to publicly disclose such material, non-public information within such time period. The Investor shall not have any liability to the Company, any of its Subsidiaries, or any of their respective directors, officers, employees, stockholders or agents, for any such disclosure. The Company understands and confirms that the Investor shall be relying on the foregoing covenants in effecting transactions in securities of the Company.

(g) Purchase Records. The Investor and the Company shall each maintain records showing the remaining Available Amount at any given time and the dates and Purchase Amounts for each Regular Purchase, Accelerated Purchase and Additional Accelerated Purchase or shall use such other method, reasonably satisfactory to the Investor and the Company.

(h) Taxes. The Company shall pay any and all transfer, stamp or similar taxes that may be payable with respect to the issuance and delivery of any shares of Common Stock to the Investor made under this Agreement.

(i) Use of Proceeds. The Company will use the net proceeds from the offering as described in the Registration Statement or the SEC Documents.

(j) Other Transactions. The Company shall not enter into, announce or recommend to its stockholders any agreement, plan, arrangement or transaction in or of which the terms thereof would restrict, materially delay, conflict with or impair the ability or right of the Company to perform its obligations under the Transaction Documents, including, without limitation, the obligation of the Company to deliver the Purchase Shares and the Commitment Shares to the Investor in accordance with the terms of the Transaction Documents.

(k) Integration. From and after the date of this Agreement, neither the Company, nor any of its affiliates will, and the Company shall use its reasonable best efforts to ensure that no Person acting on their behalf will, directly or indirectly, make any offers or sales of any security or solicit any offers to buy any security, under circumstances that would (i) require registration of the offer and sale by the Company to the Investor of any of the Securities under the Securities Act, or (ii) cause this offering of the Securities by the Company to the Investor to be integrated with other offerings by the Company in a manner that would require stockholder approval pursuant to the rules of the Principal Market on which any of the securities of the Company are listed or designated, unless in the case of this clause (ii), stockholder approval is obtained before the closing of such subsequent transaction in accordance with the rules of such Principal Market.

(l) Limitation on Variable Rate Transactions. From and after the date of this Agreement until the later of: (i) the 36-month anniversary of the date of this Agreement and (ii) the 36-month anniversary of the Commencement Date (if the Commencement has occurred), in either case irrespective of any earlier termination of this Agreement, the Company and its Subsidiaries shall be prohibited from effecting or entering into an agreement to effect any issuance by the Company or any of its Subsidiaries of Common Stock or Common Stock Equivalents (or any combination of units thereof) in any "equity line of credit", "at-the-market offering" or other continuous offering or similar offering in which the Company may offer, issue or sell Common Stock or Common Stock Equivalents (or any combination of units thereof) at a future determined price, other than in connection with an Exempt Issuance. The Investor shall be entitled to seek injunctive relief against the Company and its Subsidiaries to preclude any such issuance, which remedy shall be in addition to any right to collect damages, without the necessity of showing economic loss and without any bond or other security being required. "Common Stock Equivalents" means any securities of the Company or its Subsidiaries which entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock. "Exempt Issuance" means the issuance of (a) any Securities issued to the Investor pursuant to this Agreement, (b) any securities issued upon the exercise or exchange of or conversion of any Common Stock or Common Stock Equivalents owned or held, directly or indirectly, by the Investor at any time, (c) any securities, including, without limitation, Common Stock or Common Stock Equivalents (or any combination of units thereof), issuable to the Investor or any of its affiliates or designees pursuant to any other agreement or arrangement between the Investor or any of its affiliates or designees, on the one hand, and the Company or any of its Subsidiaries, on the other hand, entered into after the date of this Agreement, if any, or (d) Common Stock issued pursuant to an "at-the-market offering" by the Company exclusively through a registered broker-dealer acting as agent of the Company pursuant to a written agreement between the Company and such registered broker-dealer only.

6. TRANSFER AGENT INSTRUCTIONS.

(a) On the date of this Agreement, the Company shall issue irrevocable instructions to the Transfer Agent substantially in the form attached hereto as **Exhibit D** to issue the Commitment Shares in accordance with the terms of this Agreement (the "Irrevocable Transfer Agent Instructions"). The certificate(s) or book-entry statement(s) representing the Commitment Shares, except as set forth below, shall bear the following restrictive legend (the "Restrictive Legend"):

THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, UNLESS SOLD PURSUANT TO: (1) RULE 144 UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (2) AN OPINION OF HOLDER'S COUNSEL, IN A CUSTOMARY FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS.

(b) On the earlier of (i) the Commencement Date and (ii) such time that the Investor shall request, provided all conditions of Rule 144 under the Securities Act are met, the Company shall, no later than two (2) Business Days following the delivery by the Investor to the Company or the Transfer Agent of one or more legended certificates or book-entry statements representing Commitment Shares (which certificates or book-entry statements the Investor shall promptly deliver on or prior to the first to occur of the events described in clauses (i) and (ii) of this sentence), as directed by the Investor, issue and deliver (or cause to be issued and delivered) to the Investor, as requested by the Investor, either: (A) a certificate or book-entry statement representing such Commitment Shares that is free from all restrictive and other legends or (B) a number of shares of Common Stock equal to the number of Commitment Shares represented by the certificate(s) or book-entry statement(s) so delivered by the Investor as DWAC Shares. The Company shall take all actions to carry out the intent and accomplish the purposes of the immediately preceding sentence, including, without limitation, delivering all such legal opinions, consents, certificates, resolutions and instructions to the Transfer Agent, and any successor transfer agent of the Company, as may be requested from time to time by the Investor or necessary or desirable to carry out the intent and accomplish the purposes of the immediately preceding sentence. On the Commencement Date, the Company shall issue to the Transfer Agent, and any subsequent transfer agent, (i) irrevocable instructions in the form substantially similar to those used by the Investor in substantially similar transactions (the "Commencement Irrevocable Transfer Agent Instructions") and (ii) the notice of effectiveness of the Registration Statement in the form attached as an exhibit to the Registration Rights Agreement (the "Notice of Effectiveness of Registration Statement"), in each case to issue the Commitment Shares and the Purchase Shares in accordance with the terms of this Agreement and the Registration Rights Agreement. All Purchase Shares to be issued from and after Commencement to or for the benefit of the Investor pursuant to this Agreement shall be issued only as DWAC Shares. The Company represents and warrants to the Investor that, while this Agreement is effective, no instruction other than the Commencement Irrevocable Transfer Agent Instructions and the Notice of Effectiveness of Registration Statement referred to in this Section 6(b) will be given by the Company to the Transfer Agent with respect to the Purchase Shares or the Commitment Shares from and after Commencement, and the Purchase Shares and the Commitment Shares covered by the Registration Statement shall otherwise be freely transferable on the books and records of the Company. The Company agrees that if the Company fails to fully comply with the provisions of this Section 6(b) within five (5) Business Days of the Investor providing the deliveries referred to above, the Company shall, at the Investor's written instruction, purchase such shares of Common Stock containing the Restrictive Legend from the Investor at the greater of the (i) purchase price paid for such shares of Common Stock (as applicable) and (ii) the Closing Sale Price of the Common Stock on the date of the Investor's written instruction.

7. CONDITIONS TO THE COMPANY'S RIGHT TO COMMENCE SALES OF SHARES OF COMMON STOCK.

The right of the Company hereunder to commence sales of the Purchase Shares on the Commencement Date is subject to the satisfaction of each of the following conditions:

(a) The Investor shall have executed each of the Transaction Documents and delivered the same to the Company;

(b) The Registration Statement covering the resale of the Purchase Shares and all of the Commitment Shares shall have been declared effective under the Securities Act by the SEC, and no stop order with respect to the Registration Statement shall be pending or threatened by the SEC; and

(c) The representations and warranties of the Investor shall be true and correct in all material respects as of the date hereof and as of the Commencement Date as though made at that time.

8. CONDITIONS TO THE INVESTOR'S OBLIGATION TO PURCHASE SHARES OF COMMON STOCK.

The obligation of the Investor to buy Purchase Shares under this Agreement is subject to the satisfaction of each of the following conditions on or prior to the Commencement Date and, once such conditions have been initially satisfied, there shall not be any ongoing obligation to satisfy such conditions after the Commencement has occurred:

(a) The Company shall have executed each of the Transaction Documents and delivered the same to the Investor;

(b) The Company shall have issued or caused to be issued to the Investor (i) one or more certificates or book-entry statements representing the Commitment Shares free from all restrictive and other legends or (ii) a number of shares of Common Stock equal to the number of Commitment Shares as DWAC Shares, in each case in accordance with Section 6(b);

(c) The Common Stock shall be listed or quoted on the Principal Market, trading in the Common Stock shall not have been within the last 365 days suspended by the SEC or the Principal Market, and all Securities to be issued by the Company to the Investor pursuant to this Agreement shall have been approved for listing or quotation on the Principal Market in accordance with the applicable rules and regulations of the Principal Market, subject only to official notice of issuance;

(d) The Investor shall have received the opinions and negative assurances of the Company's legal counsel dated as of the Commencement Date substantially in the forms heretofore agreed by the parties hereto;

(e) The representations and warranties of the Company shall be true and correct in all material respects (except to the extent that any of such representations and warranties is already qualified as to materiality in Section 4 above, in which case, the portion of such representations and warranties so qualified shall be true and correct without further qualification) as of the date hereof and as of the Commencement Date as though made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct as of such date) and the Company shall have performed, satisfied and complied with the covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the Commencement Date. The Investor shall have received a certificate, executed by the CEO, President or CFO of the Company, dated as of the Commencement Date, to the foregoing effect in the form attached hereto as **Exhibit A**;

(f) The Board of Directors of the Company shall have adopted resolutions in substantially the form attached hereto as **Exhibit B** which shall be in full force and effect without any amendment or supplement thereto as of the Commencement Date;

(g) [RESERVED];

(h) The Commencement Irrevocable Transfer Agent Instructions and the Notice of Effectiveness of Registration Statement each shall have been delivered to and acknowledged in writing by the Company and the Company's Transfer Agent (or any successor transfer agent);

(i) The Company shall have delivered to the Investor a certificate evidencing the incorporation and good standing of the Company in the State of Delaware issued by the Secretary of State of the State of Delaware as of a date within ten (10) Business Days of the Commencement Date;

(j) The Company shall have delivered to the Investor a certified copy of the Certificate of Incorporation as certified by the Secretary of State of the State of Delaware within ten (10) Business Days of the Commencement Date;

(k) The Company shall have delivered to the Investor a secretary's certificate executed by the Secretary of the Company, dated as of the Commencement Date, in the form attached hereto as **Exhibit C**;

(l) The Registration Statement covering the resale of the Purchase Shares and all of the Commitment Shares shall have been declared effective under the Securities Act by the SEC, and no stop order with respect to the Registration Statement shall be pending or threatened by the SEC. The Company shall have prepared and filed with the SEC, not later than one (1) Business Day after the effective date of the Registration Statement, a final and complete prospectus (the preliminary form of which shall be included in the Registration Statement) and shall have delivered to the Investor a true and complete copy thereof. Such prospectus shall be current and available for the resale by the Investor of all of the Securities covered thereby. The Current Report shall have been filed with the SEC, as required pursuant to Section 5(a). All reports, schedules, registrations, forms, statements, information and other documents required to have been filed by the Company with the SEC at or prior to the Commencement Date pursuant to the reporting requirements of the Exchange Act shall have been filed with the SEC within the applicable time periods prescribed for such filings under the Exchange Act;

(m) No Event of Default has occurred, or any event which, after notice and/or lapse of time, would become an Event of Default has occurred;

(n) All federal, state and local governmental laws, rules and regulations applicable to the transactions contemplated by the Transaction Documents and necessary for the execution, delivery and performance of the Transaction Documents and the consummation of the transactions contemplated thereby in accordance with the terms thereof shall have been complied with, and all consents, authorizations and orders of, and all filings and registrations with, all federal, state and local courts or governmental agencies and all federal, state and local regulatory or self-regulatory agencies necessary for the execution, delivery and performance of the Transaction Documents and the consummation of the transactions contemplated thereby in accordance with the terms thereof shall have been obtained or made, including, without limitation, in each case those required under the Securities Act, the Exchange Act, applicable state securities or "Blue Sky" laws or applicable rules and regulations of the Principal Market, or otherwise required by the SEC, the Principal Market or any state securities regulators;

(o) No statute, regulation, order, decree, writ, ruling or injunction shall have been enacted, entered, promulgated, threatened or endorsed by any federal, state, local or foreign court or governmental authority of competent jurisdiction which prohibits the consummation of or which would materially modify or delay any of the transactions contemplated by the Transaction Documents; and

(p) No action, suit or proceeding before any federal, state, local or foreign arbitrator or any court or governmental authority of competent jurisdiction shall have been commenced or threatened, and no inquiry or investigation by any federal, state, local or foreign governmental authority of competent jurisdiction shall have been commenced or threatened, against the Company, or any of the officers, directors or affiliates of the Company, seeking to restrain, prevent or change the transactions contemplated by the Transaction Documents, or seeking material damages in connection with such transactions.

9. INDEMNIFICATION.

In consideration of the Investor's execution and delivery of the Transaction Documents and acquiring the Securities hereunder and in addition to all of the Company's other obligations under the Transaction Documents, the Company shall defend, protect, indemnify and hold harmless the Investor and all of its affiliates, stockholders, members, officers, directors, employees and direct or indirect investors and any of the foregoing Person's agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "Indemnitees") from and against any and all actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "Indemnified Liabilities"), incurred by any Indemnitee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, or (c) any cause of action, suit or claim brought or made against such Indemnitee and arising out of or resulting from the execution, delivery, performance or enforcement of the Transaction Documents or any other certificate, instrument or document contemplated hereby or thereby, other than, in the case of clause (c), with respect to Indemnified Liabilities which directly and primarily result from the fraud, gross negligence or willful misconduct of an Indemnitee. The indemnity in this Section 9 shall not apply to amounts paid in settlement of any claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld, conditioned or delayed. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities which is permissible under applicable law. Payment under this indemnification shall be made within thirty (30) days from the date Investor makes written request for it. A certificate containing reasonable detail as to the amount of such indemnification submitted to the Company by Investor shall be conclusive evidence, absent manifest error, of the amount due from the Company to Investor. If any action shall be brought against any Indemnitee in respect of which indemnity may be sought pursuant to this Agreement, such Indemnitee shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Indemnitee. Any Indemnitee shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnitee, except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of such separate counsel, a material conflict on any material issue between the position of the Company and the position of such Indemnitee, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel.

10. EVENTS OF DEFAULT.

An "Event of Default" shall be deemed to have occurred at any time as any of the following events occurs:

(a) the effectiveness of a registration statement registering the resale of the Securities lapses for any reason (including, without limitation, the issuance of a stop order or similar order) or such registration statement (or the prospectus forming a part thereof) is unavailable to the Investor for resale of any or all of the Securities to be issued to the Investor under the Transaction Documents, and such lapse or unavailability continues for a period of ten (10) consecutive Business Days or for more than an aggregate of thirty (30) Business Days in any 365-day period, but excluding a lapse or unavailability where (i) the Company terminates a registration statement after the Investor has confirmed in writing that all of the Securities covered thereby have been resold or (ii) the Company supersedes one registration statement with another registration statement, including (without limitation) by terminating a prior registration statement when it is effectively replaced with a new registration statement covering Securities (provided in the case of this clause (ii) that all of the Securities covered by the superseded (or terminated) registration statement that have not theretofore been resold are included in the superseding (or new) registration statement);

(b) the suspension of the Common Stock from trading on the Principal Market for a period of one (1) Business Day, provided that the Company may not direct the Investor to purchase any shares of Common Stock during any such suspension;

(c) the delisting of the Common Stock from the NYSE American (or nationally recognized successor thereto), provided, however, that the Common Stock is not immediately thereafter trading on the New York Stock Exchange, The NASDAQ Capital Market, The NASDAQ Global Market, The NASDAQ Global Select Market, the NYSE American, the NYSE Arca, the OTC Bulletin Board or the OTCQX or the OTCQB operated by the OTC Markets Group, Inc. (or nationally recognized successor to any of the foregoing);

(d) the failure for any reason by the Transfer Agent to issue Purchase Shares to the Investor within two (2) Business Days after the Purchase Date, Accelerated Purchase Date, Additional Accelerated Purchase Date or Tranche Purchase Date, as applicable, on which the Investor is entitled to receive such Purchase Shares;

(e) the Company breaches any representation, warranty, covenant or other term or condition under any Transaction Document if such breach would reasonably be expected to have a Material Adverse Effect and except, in the case of a breach of a covenant which is reasonably curable, only if such breach continues for a period of at least five (5) Business Days;

(f) if any Person commences a proceeding against the Company pursuant to or within the meaning of any Bankruptcy Law;

(g) if the Company, pursuant to or within the meaning of any Bankruptcy Law, (i) commences a voluntary case, (ii) consents to the entry of an order for relief against it in an involuntary case, (iii) consents to the appointment of a Custodian of it or for all or substantially all of its property, or (iv) makes a general assignment for the benefit of its creditors or is generally unable to pay its debts as the same become due;

(h) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that (i) is for relief against the Company in an involuntary case, (ii) appoints a Custodian of the Company or for all or substantially all of its property, or (iii) orders the liquidation of the Company or any Subsidiary; or

(i) if at any time the Company is not eligible to transfer its Common Stock electronically as DWAC Shares; or

(j) if at any time after the Commencement Date, the Exchange Cap is reached (to the extent such Exchange Cap is applicable pursuant to Section 2(e) hereof), and the stockholder approval referred to in Section 2(e)(i) has not been obtained in accordance with the applicable rules of the Principal Market.

In addition to any other rights and remedies under applicable law and this Agreement, so long as an Event of Default has occurred and is continuing, or if any event which, after notice and/or lapse of time, would reasonably be expected to become an Event of Default, has occurred and is continuing, the Company shall not deliver to the Investor any Regular Purchase Notice, Accelerated Purchase Notice or Additional Accelerated Purchase Notice.

11. TERMINATION

This Agreement may be terminated only as follows:

(a) If pursuant to or within the meaning of any Bankruptcy Law, the Company commences a voluntary case or any Person commences a proceeding against the Company which is not discharged within 90 days, a Custodian is appointed for the Company or for all or substantially all of its property, or the Company makes a general assignment for the benefit of its creditors (any of which would be an Event of Default as described in Sections 10(f), 10(g) and 10(h) hereof), this Agreement shall automatically terminate without any liability or payment to the Company (except as set forth below) without further action or notice by any Person.

(b) In the event that (i) the Company fails to file the Registration Statement with the SEC within the period specified in Section 5(a) hereof in accordance with the terms of the Registration Rights Agreement or (ii) the Commencement shall not have occurred on or before July 31, 2021, due to the failure to satisfy the conditions set forth in Sections 7 and 8 above with respect to the Commencement, then, in the case of clause (i) above, this Agreement may be terminated by the Investor at any time prior to the filing of the Registration Statement and, in the case of clause (ii) above, this Agreement may be terminated by either party at the close of business on July 31, 2021 or thereafter, in each case without liability of such party to the other party (except as set forth below); provided, however, that the right to terminate this Agreement under this Section 11(b) shall not be available to any party if such party is then in breach of any covenant or agreement contained in this Agreement or any representation or warranty of such party contained in this Agreement fails to be true and correct such that the conditions set forth in Section 7(c) or Section 8(e), as applicable, could not then be satisfied.

(c) At any time after the Commencement Date, the Company shall have the option to terminate this Agreement for any reason or for no reason by delivering notice (a "Company Termination Notice") to the Investor electing to terminate this Agreement without any liability whatsoever of any party to any other party under this Agreement (except as set forth below). The Company Termination Notice shall not be effective until one (1) Business Day after it has been received by the Investor.

(d) This Agreement shall automatically terminate on the date that the Company sells and the Investor purchases the full Available Amount as provided herein, without any action or notice on the part of any party and without any liability whatsoever of any party to any other party under this Agreement (except as set forth below).

(e) If, for any reason or for no reason, the full Available Amount has not been purchased in accordance with Section 2 of this Agreement by the Maturity Date, this Agreement shall automatically terminate on the Maturity Date, without any action or notice on the part of any party and without any liability whatsoever of any party to any other party under this Agreement (except as set forth below).

Except as set forth in Sections 11(a) (in respect of an Event of Default under Sections 10(f), 10(g) and 10(h)), 11(d) and 11(e), any termination of this Agreement pursuant to this Section 11 shall be effected by written notice from the Company to the Investor, or the Investor to the Company, as the case may be, setting forth the basis for the termination hereof. The representations and warranties and covenants of the Company and the Investor contained in Sections 3, 4, 5, and 6 hereof, the indemnification provisions set forth in Section 9 hereof and the agreements and covenants set forth in Sections 10, 11 and 12 shall survive the execution and delivery of this Agreement and any termination of this Agreement. No termination of this Agreement shall (i) affect the Company's or the Investor's rights or obligations under (A) this Agreement with respect to pending Regular Purchases, Accelerated Purchases or Additional Accelerated Purchases and the Company and the Investor shall complete their respective obligations with respect to any pending Regular Purchases, Accelerated Purchases and Additional Accelerated Purchases under this Agreement and (B) the Registration Rights Agreement, which shall survive any such termination, or (ii) be deemed to release the Company or the Investor from any liability for intentional misrepresentation or willful breach of any of the Transaction Documents.

12. MISCELLANEOUS.

(a) Governing Law; Jurisdiction; Jury Trial. The corporate laws of the State of Delaware shall govern all issues concerning the relative rights of the Company and its stockholders. All other questions concerning the construction, validity, enforcement and interpretation of this Agreement, the Registration Rights Agreement and the other Transaction Documents shall be governed by the internal laws of the State of Illinois, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Illinois or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Illinois. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the State of Illinois, County of Cook, for the adjudication of any dispute hereunder or under the other Transaction Documents or in connection herewith or therewith, or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

(b) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party; provided that a facsimile signature or signature delivered by e-mail in a ".pdf" format data file shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original signature.

(c) Headings. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

(d) Severability. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

(e) Entire Agreement. The Transaction Documents supersede all other prior oral or written agreements between the Investor, the Company, their affiliates and Persons acting on their behalf with respect to the subject matter thereof, and this Agreement, the other Transaction Documents and the instruments referenced herein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor the Investor makes any representation, warranty, covenant or undertaking with respect to such matters. The Company acknowledges and agrees that is has not relied on, in any manner whatsoever, any representations or statements, written or oral, other than as expressly set forth in the Transaction Documents.

(f) Notices. Any notices, consents or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt when delivered personally; (ii) upon receipt when sent by facsimile or email (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (iii) one Business Day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses for such communications shall be:

If to the Company:

Brooklyn ImmunoTherapeutics, Inc.
140 58th Street
Building A, Suite 2100
Brooklyn, NY 11220
Telephone: (212) 582-1199
E-mail: hfederoff@brooklynitx.com
Attention: Howard Federoff, President & Chief Executive Officer

With a copy to (which shall not constitute notice or service of process):

K&L Gates LLP
1 Park Plaza, 12th Floor
Irvine, CA 92614
Telephone: (949) 623-35-92
E-mail: rema.awad@klgates.com
Attention: Rema Awad, Esq.

If to the Investor:

Lincoln Park Capital Fund, LLC
440 North Wells, Suite 410
Chicago, IL 60654
Telephone: 312-822-9300
Facsimile: 312-822-9301
E-mail: jscheinfeld@lpcfunds.com/jcope@lpcfunds.com
Attention: Josh Scheinfeld/Jonathan Cope

With a copy to (which shall not constitute notice or service of process):

Dorsey & Whitney LLP
51 West 52nd Street
New York, NY 10019
Telephone: (212) 415-9214
Facsimile: (212) 953-7201
E-mail: marsico.anthony@dorsey.com
Attention: Anthony J. Marsico, Esq.

If to the Transfer Agent:

American Stock Transfer & Trust Company
6201 15th Avenue
Brooklyn, NY 11219
Telephone: (718) 921-8300
Facsimile: (718) 765-8717
Attention: Janice Santiago

or at such other address and/or facsimile number and/or to the attention of such other Person as the recipient party has specified by written notice given to each other party three (3) Business Days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent or other communication, (B) mechanically or electronically generated by the sender's facsimile machine or email account containing the time, date, and recipient facsimile number or email address, as applicable, and an image of the first page of such transmission or (C) provided by a nationally recognized overnight delivery service, shall be rebuttable evidence of personal service, receipt by facsimile or receipt from a nationally recognized overnight delivery service in accordance with clause (i), (ii) or (iii) above, respectively.

(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Investor, including by merger or consolidation. The Investor may not assign its rights or obligations under this Agreement.

(h) No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns and, except as set forth in Section 9, is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

(i) Publicity. The Company shall afford the Investor and its counsel with the opportunity to review and comment upon, shall consult with the Investor and its counsel on the form and substance of, and shall give due consideration to all such comments from the Investor or its counsel on, any press release, SEC filing or any other public disclosure by or on behalf of the Company relating to the Investor, its purchases hereunder or any aspect of the Transaction Documents or the transactions contemplated thereby, not less than 24 hours prior to the issuance, filing or public disclosure thereof. The Investor must be provided with a final version of any such press release, SEC filing or other public disclosure at least 24 hours prior to any release, filing or use by the Company thereof. The Company agrees and acknowledges that its failure to fully comply with this provision constitutes a Material Adverse Effect.

(j) Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to consummate and make effective, as soon as reasonably possible, the Commencement, and to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(k) No Financial Advisor, Placement Agent, Broker or Finder. The Company represents and warrants to the Investor that it has not engaged any financial advisor, placement agent, broker or finder in connection with the transactions contemplated hereby. The Investor represents and warrants to the Company that it has not engaged any financial advisor, placement agent, broker or finder in connection with the transactions contemplated hereby. The Company shall be responsible for the payment of any fees or commissions, if any, of any financial advisor, placement agent, broker or finder relating to or arising out of the transactions contemplated hereby. The Company shall pay, and hold the Investor harmless against, any liability, loss or expense (including, without limitation, reasonable attorneys' fees and out of pocket expenses) arising in connection with any such claim.

(l) No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

(m) Remedies, Other Obligations, Breaches and Injunctive Relief. The Investor's remedies provided in this Agreement, including, without limitation, the Investor's remedies provided in Section 9, shall be cumulative and in addition to all other remedies available to the Investor under this Agreement, at law or in equity (including a decree of specific performance and/or other injunctive relief), no remedy of the Investor contained herein shall be deemed a waiver of compliance with the provisions giving rise to such remedy and nothing herein shall limit the Investor's right to pursue actual damages for any failure by the Company to comply with the terms of this Agreement. The Company acknowledges that a breach by it of its obligations hereunder will cause irreparable harm to the Investor and that the remedy at law for any such breach may be inadequate. The Company therefore agrees that, in the event of any such breach or threatened breach, the Investor shall be entitled, in addition to all other available remedies, to an injunction restraining any breach, without the necessity of showing economic loss and without any bond or other security being required.

(n) Enforcement Costs. If: (i) this Agreement is placed by the Investor in the hands of an attorney for enforcement or is enforced by the Investor through any legal proceeding; (ii) an attorney is retained to represent the Investor in any bankruptcy, reorganization, receivership or other proceedings affecting creditors' rights and involving a claim under this Agreement; or (iii) an attorney is retained to represent the Investor in any other proceedings whatsoever in connection with this Agreement, then the Company shall pay to the Investor, as incurred by the Investor, all reasonable costs and expenses including reasonable attorneys' fees incurred in connection therewith, in addition to all other amounts due hereunder.

(o) Amendment and Waiver; Failure or Indulgence Not Waiver. No provision of this Agreement may be amended or waived by the parties from and after the date that is one (1) Business Day immediately preceding the initial filing of the Registration Statement with the SEC. Subject to the immediately preceding sentence, (i) no provision of this Agreement may be amended other than by a written instrument signed by both parties hereto and (ii) no provision of this Agreement may be waived other than in a written instrument signed by the party against whom enforcement of such waiver is sought. No failure or delay in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

* * * * *

IN WITNESS WHEREOF, the Investor and the Company have caused this Agreement to be duly executed as of the date first written above.

THE COMPANY:

BROOKLYN IMMUNOTHERAPEUTICS, INC.

By: /s/ Howard Federoff
Name: Howard Federoff
Title: President & Chief Executive Officer

INVESTOR:

LINCOLN PARK CAPITAL FUND, LLC
BY: LINCOLN PARK CAPITAL, LLC
BY: ROCKLEDGE CAPITAL CORPORATION

By: /s/ Josh Scheinfeld
Name: Josh Scheinfeld
Title: President

EXHIBITS

Exhibit A	Form of Officer's Certificate
Exhibit B	Form of Resolutions of Board of Directors of the Company
Exhibit C	Form of Secretary's Certificate
Exhibit D	Form of Letter to Transfer Agent

EXHIBIT A

FORM OF OFFICER'S CERTIFICATE

This Officer's Certificate ("**Certificate**") is being delivered pursuant to Section 8(e) of that certain Purchase Agreement dated as of April 26, 2021 ("**Purchase Agreement**"), by and between **BROOKLYN IMMUNOTHERAPEUTICS, INC.**, a Delaware corporation (the "**Company**"), and **LINCOLN PARK CAPITAL FUND, LLC** (the "**Investor**"). Terms used herein and not otherwise defined shall have the meanings ascribed to them in the Purchase Agreement.

The undersigned, _____, _____ of the Company, hereby certifies, on behalf of the Company and not in his individual capacity, as follows:

1. I am the _____ of the Company and make the statements contained in this Certificate;

2. The representations and warranties of the Company are true and correct in all material respects (except to the extent that any of such representations and warranties is already qualified as to materiality in Section 4 of the Purchase Agreement, in which case, such representations and warranties are true and correct without further qualification) as of the date when made and as of the Commencement Date as though made at that time (except for representations and warranties that speak as of a specific date, in which case such representations and warranties are true and correct as of such date);

3. The Company has performed, satisfied and complied in all material respects with covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Company at or prior to the Commencement Date.

4. The Company has not taken any steps, and does not currently expect to take any steps, to seek protection pursuant to any Bankruptcy Law nor does the Company or any of its Subsidiaries have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy or insolvency proceedings. The Company is financially solvent and is generally able to pay its debts as they become due.

IN WITNESS WHEREOF, I have hereunder signed my name on this ___ day of _____.

_____
Name:
Title:

The undersigned as Secretary of **BROOKLYN IMMUNOTHERAPEUTICS, INC.**, a Delaware corporation, hereby certifies that _____ is the duly elected, appointed, qualified and acting _____ of _____ and that the signature appearing above is his genuine signature.

_____
Secretary

EXHIBIT B

FORM OF COMPANY RESOLUTIONS
FOR SIGNING PURCHASE AGREEMENT

UNANIMOUS WRITTEN CONSENT OF
BROOKLYN IMMUNOTHERAPEUTICS, INC.

In accordance with the corporate laws of the state of Delaware, the undersigned, being all of the directors of **BROOKLYN IMMUNOTHERAPEUTICS, INC.**, a Delaware corporation (the "Corporation") do hereby consent to and adopt the following resolutions as the action of the Board of Directors for and on behalf of the Corporation and hereby direct that this Consent be filed with the minutes of the proceedings of the Board of Directors:

WHEREAS, there has been presented to the Board of Directors of the Corporation a draft of the Purchase Agreement (the "Purchase Agreement") by and between the Corporation and Lincoln Park Capital Fund, LLC ("Lincoln Park"), providing for the purchase by Lincoln Park of up to Twenty Million Dollars ($20,000,000) of the Corporation's common stock, $0.005 par value per share (the "Common Stock"); and

WHEREAS, after careful consideration of the Purchase Agreement, the documents incident thereto and other factors deemed relevant by the Board of Directors, the Board of Directors has determined that it is advisable and in the best interests of the Corporation to engage in the transactions contemplated by the Purchase Agreement, including, but not limited to, the issuance of 56,041 shares of Common Stock to Lincoln Park as a commitment fee (the "Commitment Shares") and the sale of shares of Common Stock to Lincoln Park up to the available amount under the Purchase Agreement (the "Purchase Shares").

Transaction Documents

NOW, THEREFORE, BE IT RESOLVED, that the transactions described in the Purchase Agreement are hereby approved and _____ (the "Authorized Officers") are severally authorized to execute and deliver the Purchase Agreement, and any other agreements or documents contemplated thereby including, without limitation, a registration rights agreement (the "Registration Rights Agreement") providing for the registration of the shares of the Company's Common Stock issuable in respect of the Purchase Agreement on behalf of the Corporation, with such amendments, changes, additions and deletions as the Authorized Officers may deem to be appropriate and approve on behalf of, the Corporation, such approval to be conclusively evidenced by the signature of an Authorized Officer thereon; and

FURTHER RESOLVED, that the terms and provisions of the Registration Rights Agreement by and among the Corporation and Lincoln Park are hereby approved and the Authorized Officers are authorized to execute and deliver the Registration Rights Agreement (pursuant to the terms of the Purchase Agreement), with such amendments, changes, additions and deletions as the Authorized Officer may deem appropriate and approve on behalf of, the Corporation, such approval to be conclusively evidenced by the signature of an Authorized Officer thereon; and

FURTHER RESOLVED, that the terms and provisions of the forms of Irrevocable Transfer Agent Instructions and Notice of Effectiveness of Registration Statement (collectively, the "Instructions") are hereby approved and the Authorized Officers are authorized to execute and deliver the Instructions on behalf of the Company in accordance with the Purchase Agreement, with such amendments, changes, additions and deletions as the Authorized Officers may deem appropriate and approve on behalf of, the Corporation, such approval to be conclusively evidenced by the signature of an Authorized Officer thereon; and

Execution of Purchase Agreement

FURTHER RESOLVED, that the Corporation be and it hereby is authorized to execute the Purchase Agreement providing for the purchase of up to Twenty Million Dollars ($20,000,000) of the Corporation's common stock; and

Issuance of Common Stock

FURTHER RESOLVED, that the Corporation is hereby authorized to issue to Lincoln Park Capital Fund, LLC, 56,041 shares of Common Stock as Commitment Shares and that upon issuance of the Commitment Shares pursuant to the Purchase Agreement the Commitment Shares shall be duly authorized, validly issued, fully paid and nonassessable with no personal liability attaching to the ownership thereof; and

FURTHER RESOLVED, that the Corporation is hereby authorized to issue shares of Common Stock upon the purchase of Purchase Shares up to the Available Amount under the Purchase Agreement in accordance with the terms of the Purchase Agreement and that, upon issuance of the Purchase Shares pursuant to the Purchase Agreement, the Purchase Shares will be duly authorized, validly issued, fully paid and nonassessable with no personal liability attaching to the ownership thereof; and

FURTHER RESOLVED, that the Corporation shall initially reserve [_____] shares of Common Stock for issuance as Purchase Shares under the Purchase Agreement.

Approval of Actions

FURTHER RESOLVED, that, without limiting the foregoing, the Authorized Officers are, and each of them hereby is, authorized and directed to proceed on behalf of the Corporation and to take all such steps as deemed necessary or appropriate, with the advice and assistance of counsel, to cause the Corporation to consummate the agreements referred to herein and to perform its obligations under such agreements; and

FURTHER RESOLVED, that the Authorized Officers be, and each of them hereby is, authorized, empowered and directed on behalf of and in the name of the Corporation, to take or cause to be taken all such further actions and to execute and deliver or cause to be executed and delivered all such further agreements, amendments, documents, certificates, reports, schedules, applications, notices, letters and undertakings and to incur and pay all such fees and expenses as in their judgment shall be necessary, proper or desirable to carry into effect the purpose and intent of any and all of the foregoing resolutions, and that all actions heretofore taken by any officer or director of the Corporation in connection with the transactions contemplated by the agreements described herein are hereby approved, ratified and confirmed in all respects.

IN WITNESS WHEREOF, the Board of Directors has executed and delivered this Consent effective as of _____, 2021.

_____

_____

_____

being all of the directors of **BROOKLYN IMMUNOTHERAPEUTICS, INC.**

EXHIBIT C

FORM OF SECRETARY'S CERTIFICATE

This Secretary's Certificate ("Certificate") is being delivered pursuant to Section 8(k) of that certain Purchase Agreement dated as of April 26, 2021 ("Purchase Agreement"), by and between **BROOKLYN IMMUNOTHERAPEUTICS, INC.**, a Delaware corporation (the "Company"), and **LINCOLN PARK CAPITAL FUND, LLC** (the "Investor"), pursuant to which the Company may sell to the Investor up to Twenty Million Dollars ($20,000,000) of the Company's Common Stock, $0.005 par value per share (the "Common Stock"). Terms used herein and not otherwise defined shall have the meanings ascribed to them in the Purchase Agreement.

The undersigned, _____, Secretary of the Company, hereby certifies, on behalf of the Company and not in his individual capacity, as follows:

1. I am the Secretary of the Company and make the statements contained in this Secretary's Certificate.

2. Attached hereto as Exhibit A and Exhibit B are true, correct and complete copies of the Company's bylaws ("Bylaws") and Certificate of Incorporation ("Charter"), in each case, as amended through the date hereof, and no action has been taken by the Company, its directors, officers or stockholders, in contemplation of the filing of any further amendment relating to or affecting the Bylaws or Charter.

3. Attached hereto as Exhibit C are true, correct and complete copies of the resolutions duly adopted by unanimous written consent of the Board of Directors of the Company on [_____]. Such resolutions have not been amended, modified or rescinded and remain in full force and effect and such resolutions are the only resolutions adopted by the Company's Board of Directors, or any committee thereof, or the stockholders of the Company relating to or affecting (i) the entering into and performance of the Purchase Agreement, or the issuance, offering and sale of the Purchase Shares and the Commitment Shares and (ii) and the performance of the Company of its obligation under the Transaction Documents as contemplated therein.

4. As of the date hereof, the authorized, issued and reserved capital stock of the Company is as set forth on Exhibit D hereto.

IN WITNESS WHEREOF, I have hereunder signed my name on this ___ day of _____.

_____
Secretary

The undersigned as _____ of **BROOKLYN IMMUNOTHERAPEUTICS, INC.**, a Delaware corporation, hereby certifies that _____ is the duly elected, appointed, qualified and acting Secretary of _____, and that the signature appearing above is his genuine signature.

_____

EXHIBIT D

FORM OF LETTER TO THE TRANSFER AGENT FOR THE ISSUANCE OF THE COMMITMENT SHARES AT SIGNING OF THE PURCHASE AGREEMENT

[COMPANY LETTERHEAD]

[DATE]

[TRANSFER AGENT]

_____

_____

_____

Re: Issuance of Common Stock to Lincoln Park Capital Fund, LLC

Dear _____,

On behalf of **BROOKLYN IMMUNOTHERAPEUTICS, INC.**, (the "Company"), you are hereby instructed to issue **as soon as possible** a book-entry statement representing an aggregate of [_____] shares of our common stock in the name of **Lincoln Park Capital Fund, LLC**. The book-entry statement should be dated April 26, 2021. The book-entry statement should bear the following restrictive legend:

> **THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, UNLESS SOLD PURSUANT TO: (1) RULE 144 UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (2) AN OPINION OF HOLDER'S COUNSEL, IN A CUSTOMARY FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS.**

The book-entry statement should be sent **as soon as possible via overnight mail** to the following address:

Lincoln Park Capital Fund, LLC
440 North Wells, Suite 410
Chicago, IL 60654
Attention: Josh Scheinfeld/Jonathan Cope

Thank you very much for your help. Please call me at _____ if you have any questions or need anything further.

BROOKLYN IMMUNOTHERAPEUTICS, INC.

BY: _____
[name]
[title]

Exhibit 10.2

REGISTRATION RIGHTS AGREEMENT

REGISTRATION RIGHTS AGREEMENT (this " Agreement"), dated as of April 26, 2021, by and between **BROOKLYN IMMUNOTHERAPEUTICS, INC.,** a Delaware corporation (the "Company"), and **LINCOLN PARK CAPITAL FUND, LLC, an Illinois limited liability company** (together with it permitted assigns, the "Buyer"). Capitalized terms used herein and not otherwise defined herein shall have the respective meanings set forth in the Purchase Agreement by and between the parties hereto, dated as of the date hereof (as amended, restated, supplemented or otherwise modified from time to time, the "Purchase Agreement").

WHEREAS:

Subject to the terms and conditions set forth in the Purchase Agreement, the Company wishes to sell to the Investor, and the Investor wishes to buy from the Company, up to Twenty Million Dollars ($20,000,000) of Purchase Shares.

To induce the Buyer to enter into the Purchase Agreement, the Company has agreed to provide certain registration rights under the Securities Act of 1933, as amended, and the rules and regulations thereunder, or any similar successor statute (collectively, the "Securities Act"), and applicable state securities laws.

NOW, THEREFORE, in consideration of the promises and the mutual covenants contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Buyer hereby agree as follows:

1. DEFINITIONS.

As used in this Agreement, the following terms shall have the following meanings:

a. "Investor" means the Buyer, any transferee or assignee thereof to whom a Buyer assigns its rights under this Agreement in accordance with Section 9 and who agrees to become bound by the provisions of this Agreement, and any transferee or assignee thereof to whom a transferee or assignee assigns its rights under this Agreement in accordance with Section 9 and who agrees to become bound by the provisions of this Agreement.

b. "Person" means any individual or entity including but not limited to any corporation, a limited liability company, an association, a partnership, an organization, a business, an individual, a governmental or political subdivision thereof or a governmental agency.

c. "Register," "registered," and "registration" refer to a registration effected by preparing and filing one or more registration statements of the Company in compliance with the Securities Act and pursuant to Rule 415 under the Securities Act or any successor rule providing for offering securities on a continuous basis ("Rule 415"), and the declaration or ordering of effectiveness of such registration statement(s) by the United States Securities and Exchange Commission (the "SEC").

d. "Registrable Securities" means all of the Commitment Shares and all of the Purchase Shares that may, from time to time, be issued or become issuable to the Investor under the Purchase Agreement (without regard to any limitation or restriction on purchases), and any and all shares of capital stock issued or issuable with respect to the Purchase Shares, the Commitment Shares or the Purchase Agreement as a result of any stock split, stock dividend, recapitalization, exchange or similar event or otherwise, without regard to any limitation on purchases under the Purchase Agreement.

e. "Registration Statement" means one or more registration statements of the Company covering only the sale of the Registrable Securities.

2. REGISTRATION.

a. Mandatory Registration. The Company shall, within twenty (20) days after the date hereof, file with the SEC an initial Registration Statement covering a number of Registrable Securities having a "Proposed Maximum Aggregate Offering Price" (for purposes of calculation of the registration fee) equal to $20,000,000, so as to permit the resale of such Registrable Securities by the Investor under Rule 415 under the Securities Act at then prevailing market prices (and not fixed prices), subject to the aggregate number of authorized shares of the Company's Common Stock then available for issuance in its Certificate of Incorporation. The initial Registration Statement shall register only the Registrable Securities. The Investor and its counsel shall have a reasonable opportunity to review and comment upon such Registration Statement and any amendment or supplement to such Registration Statement and any related prospectus prior to its filing with the SEC, and the Company shall give due consideration to all such comments. The Investor shall furnish all information reasonably requested by the Company for inclusion therein. The Company shall use its commercially reasonable efforts to have the Registration Statement and any amendment declared effective by the SEC at the earliest possible date. The Company shall use commercially reasonable efforts to keep the Registration Statement effective pursuant to Rule 415 promulgated under the Securities Act and available for the resale by the Investor of all of the Registrable Securities covered thereby at all times until the date on which the Investor shall have resold all the Registrable Securities covered thereby and no Available Amount remains under the Purchase Agreement (the "Registration Period"). The Registration Statement (including any amendments or supplements thereto and prospectuses contained therein) shall not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading.

b. Rule 424 Prospectus. The Company shall, as required by applicable securities regulations, from time to time file with the SEC, pursuant to Rule 424 promulgated under the Securities Act, the prospectus and prospectus supplements, if any, to be used in connection with sales of the Registrable Securities under the Registration Statement. The Investor and its counsel shall have a reasonable opportunity to review and comment upon such prospectus prior to its filing with the SEC, and the Company shall give due consideration to all such comments. The Investor shall use its commercially reasonable efforts to comment upon such prospectus within one (1) Business Day from the date the Investor receives the substantially complete draft of such prospectus.

c. Sufficient Number of Shares Registered. In the event the number of shares available under the Registration Statement is insufficient to cover all of the Registrable Securities, the Company shall amend the Registration Statement or file a new Registration Statement (a "New Registration Statement"), so as to cover all of such Registrable Securities (subject to the limitations set forth in Section 2(a)) as soon as practicable, but in any event not later than ten (10) Business Days after the necessity therefor arises, subject to any limits that may be imposed by the SEC pursuant to Rule 415 under the Securities Act. The Company shall use its commercially reasonable efforts to cause such amendment and/or New Registration Statement to become effective as soon as practicable following the filing thereof.

d. Offering. If the staff of the SEC (the "Staff") or the SEC seeks to characterize any offering pursuant to a Registration Statement filed pursuant to this Agreement as constituting an offering of securities that does not permit such Registration Statement to become effective and be used for resales by the Investor under Rule 415 at then-prevailing market prices (and not fixed prices), or if after the filing of the initial Registration Statement with the SEC pursuant to Section 2(a), the Company is otherwise required by the Staff or the SEC to reduce the number of Registrable Securities included in such initial Registration Statement, then the Company shall reduce the number of Registrable Securities to be included in such initial Registration Statement (with the prior consent, which shall not be unreasonably withheld, of the Investor and its legal counsel as to the specific Registrable Securities to be removed therefrom) until such time as the Staff and the SEC shall so permit such Registration Statement to become effective and be used as aforesaid. In the event of any reduction in Registrable Securities pursuant to this paragraph, the Company shall file one or more New Registration Statements in accordance with Section 2(c) until such time as all Registrable Securities have been included in Registration Statements that have been declared effective and the prospectuses contained therein is available for use by the Investor. Notwithstanding any provision herein or in the Purchase Agreement to the contrary, the Company's obligations to register Registrable Securities (and any related conditions to the Investor's obligations) shall be qualified as necessary to comport with any requirement of the SEC or the Staff as addressed in this Section 2(d).

3. RELATED OBLIGATIONS.

With respect to the Registration Statement and whenever any Registrable Securities are to be registered pursuant to Section 2 including on any New Registration Statement, the Company shall use its commercially reasonable efforts to effect the registration of the Registrable Securities in accordance with the intended method of disposition thereof and, pursuant thereto, the Company shall have the following obligations:

a. The Company shall prepare and file with the SEC such amendments (including post-effective amendments) and supplements to any Registration Statement and the prospectus used in connection with such Registration Statement, which prospectus is to be filed pursuant to Rule 424 promulgated under the Securities Act, as may be necessary to keep the Registration Statement or any New Registration Statement effective at all times during the Registration Period, and, during such period, comply with the provisions of the Securities Act with respect to the disposition of all Registrable Securities of the Company covered by the Registration Statement or any New Registration Statement until such time as all of such Registrable Securities shall have been disposed of in accordance with the intended methods of disposition by the Investor as set forth in such Registration Statement.

b. The Company shall permit the Investor to review and comment upon the Registration Statement or any New Registration Statement and all amendments and supplements thereto at least two (2) Business Days prior to their filing with the SEC, and not file any such document in a form to which Investor reasonably objects. The Investor shall use its commercially reasonable efforts to comment upon the Registration Statement or any New Registration Statement and any amendments or supplements thereto within two (2) Business Days from the date the Investor receives the substantially complete draft thereof. Company shall furnish to the Investor, without charge any correspondence from the SEC or the staff of the SEC to the Company or its representatives relating to the Registration Statement or any New Registration Statement.

c. Upon request of the Investor, the Company shall furnish to the Investor, (i) promptly after the same is prepared and filed with the SEC, at least one copy of such Registration Statement and any amendment(s) thereto, including financial statements and schedules, all documents incorporated therein by reference and all exhibits, (ii) upon the effectiveness of any Registration Statement, a copy of the prospectus included in such Registration Statement and all amendments and supplements thereto (or such other number of copies as the Investor may reasonably request) and (iii) such other documents, including copies of any preliminary or final prospectus, as the Investor may reasonably request from time to time in order to facilitate the disposition of the Registrable Securities owned by the Investor. For the avoidance of doubt, any filing available to the Investor via the SEC's live EDGAR system shall be deemed "furnished to the Investor" hereunder.

d. The Company shall use commercially reasonable efforts to (i) register and qualify the Registrable Securities covered by a Registration Statement under such other securities or "blue sky" laws of such jurisdictions in the United States as the Investor reasonably requests, (ii) prepare and file in those jurisdictions, such amendments (including post-effective amendments) and supplements to such registrations and qualifications as may be necessary to maintain the effectiveness thereof during the Registration Period, (iii) take such other actions as may be necessary to maintain such registrations and qualifications in effect at all times during the Registration Period, and (iv) take all other actions reasonably necessary or advisable to qualify the Registrable Securities for sale in such jurisdictions; provided, however, that the Company shall not be required in connection therewith or as a condition thereto to (x) qualify to do business in any jurisdiction where it would not otherwise be required to qualify but for this Section 3(d), (y) subject itself to general taxation in any such jurisdiction, or (z) file a general consent to service of process in any such jurisdiction. The Company shall promptly notify the Investor who holds Registrable Securities of the receipt by the Company of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or "blue sky" laws of any jurisdiction in the United States or its receipt of actual notice of the initiation or threatening of any proceeding for such purpose.

e. As promptly as practicable after becoming aware of such event or facts, the Company shall notify the Investor in writing of the happening of any event or existence of such facts as a result of which the prospectus included in any Registration Statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and promptly prepare a supplement or amendment to such Registration Statement to correct such untrue statement or omission, and deliver a copy of such supplement or amendment to the Investor (or such other number of copies as the Investor may reasonably request). The Company shall also promptly notify the Investor in writing (i) when a prospectus or any prospectus supplement or post-effective amendment has been filed, and when a Registration Statement or any post-effective amendment has become effective (notification of such effectiveness shall be delivered to the Investor by email or facsimile on the same day of such effectiveness and by overnight mail), (ii) of any request by the SEC for amendments or supplements to any Registration Statement or related prospectus or related information, and (iii) of the Company's reasonable determination that a post-effective amendment to a Registration Statement would be appropriate.

f. The Company shall use its commercially reasonable efforts to prevent the issuance of any stop order or other suspension of effectiveness of any Registration Statement, or the suspension of the qualification of any Registrable Securities for sale in any jurisdiction and, if such an order or suspension is issued, to obtain the withdrawal of such order or suspension at the earliest possible moment and to notify the Investor of the issuance of such order and the resolution thereof or its receipt of actual notice of the initiation or threat of any proceeding for such purpose.

g. The Company shall (i) cause all the Registrable Securities to be listed on each securities exchange on which securities of the same class or series issued by the Company are then listed, if any, if the listing of such Registrable Securities is then permitted under the rules of such exchange, or (ii) secure designation and quotation of all the Registrable Securities on the Principal Market. The Company shall pay all fees and expenses in connection with satisfying its obligation under this Section.

h. The Company shall cooperate with the Investor to facilitate the timely issuance of the Registrable Securities to be offered pursuant to any Registration Statement, it being agreed that such Registrable Securities shall be issued as DWAC Shares and in such denominations or amounts as the Investor may reasonably request and registered in such names as the Investor may request.

i. The Company shall at all times provide a transfer agent and registrar with respect to its Common Stock.

j. If reasonably requested by the Investor, the Company shall (i) promptly incorporate in a prospectus supplement or post-effective amendment such information as the Investor believes should be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities; (ii) make all required filings of such prospectus supplement or post-effective amendment as soon as practicable upon notification of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) supplement or make amendments to any Registration Statement or New Registration Statement.

k. The Company shall use its commercially reasonable efforts to cause the Registrable Securities covered by any Registration Statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to consummate the disposition of such Registrable Securities.

l. Within one (1) Business Day after any Registration Statement which includes the Registrable Securities is declared effective by the SEC, the Company shall deliver, and shall cause legal counsel for the Company to deliver, to the transfer agent for such Registrable Securities (with copies to the Investor) confirmation that such Registration Statement has been declared effective by the SEC in the form attached hereto as Exhibit A. Thereafter, if requested by the Buyer at any time, the Company shall require its counsel to deliver to the Buyer a written confirmation whether or not the effectiveness of such Registration Statement has lapsed at any time for any reason (including, without limitation, the issuance of a stop order) and whether or not the Registration Statement is current and available to the Buyer for sale of all of the Registrable Securities.

m. The Company shall take all other reasonable actions necessary to expedite and facilitate disposition by the Investor of the Registrable Securities pursuant to any Registration Statement.

4. OBLIGATIONS OF THE INVESTOR.

a. The Company shall notify the Investor in writing of the information the Company reasonably requires from the Investor in connection with any Registration Statement hereunder. The Investor shall furnish to the Company such information regarding itself, the Registrable Securities held by it and the intended method of disposition of the Registrable Securities held by it as shall be reasonably required to effect the registration of such Registrable Securities and shall execute such documents in connection with such registration as the Company may reasonably request.

b. The Investor agrees to cooperate with the Company as reasonably requested by the Company in connection with the preparation and filing of any Registration Statement hereunder.

c. The Investor agrees that, upon receipt of any notice from the Company of the happening of any event or existence of facts of the kind described in Section 3(f) or the first sentence of 3(e), the Investor will immediately discontinue disposition of Registrable Securities pursuant to any Registration Statement(s) covering such Registrable Securities until the Investor's receipt of the copies of a notice regarding the resolution or withdrawal of the stop order or suspension as contemplated by Section 3(f) or the supplemented or amended prospectus as contemplated by the first sentence of 3(e). Notwithstanding anything to the contrary, the Company shall cause its transfer agent to promptly deliver shares of Common Stock without any restrictive legend in accordance with the terms of the Purchase Agreement in connection with any sale of Registrable Securities with respect to which an Investor has entered into a contract for sale prior to the Investor's receipt of a notice from the Company of the happening of any event of the kind described in Section 3(f) or the first sentence of Section 3(e) and for which the Investor has not yet settled.

5. EXPENSES OF REGISTRATION.

All reasonable expenses, other than sales or brokerage commissions, incurred in connection with registrations, filings or qualifications pursuant to Sections 2 and 3, including, without limitation, all registration, listing and qualifications fees, printers and accounting fees, and fees and disbursements of counsel for the Company, shall be paid by the Company.

6. INDEMNIFICATION.

a. To the fullest extent permitted by law, the Company will, and hereby does, indemnify, hold harmless and defend the Investor, the members, the directors, officers, partners, employees, agents, representatives of the Investor and each Person, if any, who controls the Investor within the meaning of the Securities Act or the Securities Exchange Act of 1934, as amended (the "Exchange Act") (each, an "Indemnified Person"), against any losses, claims, damages, liabilities, judgments, fines, penalties, charges, costs, attorneys' fees, amounts paid in settlement or expenses, joint or several, (collectively, "Claims") incurred in investigating, preparing or defending any action, claim, suit, inquiry, proceeding, investigation or appeal taken from the foregoing by or before any court or governmental, administrative or other regulatory agency, body or the SEC, whether pending or threatened, whether or not an indemnified party is or may be a party thereto ("Indemnified Damages"), to which any of them may become subject insofar as such Claims (or actions or proceedings, whether commenced or threatened, in respect thereof) arise out of or are based upon: (i) any untrue statement or alleged untrue statement of a material fact in the Registration Statement, any New Registration Statement or any post-effective amendment thereto or in any filing made in connection with the qualification of the offering under the securities or other "blue sky" laws of any jurisdiction in which Registrable Securities are offered ("Blue Sky Filing"), or the omission or alleged omission to state a material fact required to be stated therein or necessary to make the statements therein not misleading, (ii) any untrue statement or alleged untrue statement of a material fact contained in the final prospectus (as amended or supplemented, if the Company files any amendment thereof or supplement thereto with the SEC) or the omission or alleged omission to state therein any material fact necessary to make the statements made therein, in light of the circumstances under which the statements therein were made, not misleading, (iii) any violation or alleged violation by the Company of the Securities Act, the Exchange Act, any other law, including, without limitation, any state securities law, or any rule or regulation thereunder relating to the offer or sale of the Registrable Securities pursuant to the Registration Statement or any New Registration Statement or (iv) any material violation by the Company of this Agreement (the matters in the foregoing clauses (i) through (iv) being, collectively, "Violations"). The Company shall reimburse each Indemnified Person promptly as such expenses are incurred and are due and payable, for any reasonable legal fees or other reasonable expenses incurred by them in connection with investigating or defending any such Claim. Notwithstanding anything to the contrary contained herein, the indemnification agreement contained in this Section 6(a): (i) shall not apply to a Claim by an Indemnified Person arising out of or based upon a Violation which occurs in reliance upon and in conformity with information about the Investor furnished in writing to the Company by any Indemnified Person expressly for use in connection with the preparation of the Registration Statement, any New Registration Statement or any such amendment thereof or supplement thereto or prospectus contained therein, if such Registration Statement, New Registration Statement or amendment thereof or supplement thereto or prospectus contained therein was timely made available by the Company pursuant to Section 3(c) or Section 3(e); (ii) with respect to any superseded prospectus, shall not inure to the benefit of any Indemnified Person from whom the Indemnified Person asserting any such Claim purchased the Registrable Securities that are the subject thereof (or to the benefit of any person controlling such Indemnified Person) if the untrue statement or omission of material fact contained in the superseded prospectus was corrected in the revised prospectus, as then amended or supplemented, if such revised prospectus was timely made available by the Company pursuant to Section 3(c) or Section 3(e), and the Indemnified Person was promptly advised in writing not to use the incorrect prospectus prior to the use giving rise to a violation and such Indemnified Person, notwithstanding such advice, used it; (iii) shall not be available to the extent such Claim is based on a failure of the Investor to deliver or to cause to be delivered the prospectus made available by the Company, if such prospectus was timely made available by the Company pursuant to Section 3(c) or Section 3(e); and (iv) shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Company, which consent shall not be unreasonably withheld. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Indemnified Person and shall survive the transfer of the Registrable Securities by the Investor pursuant to Section 9.

b. In connection with the Registration Statement or any New Registration Statement, the Investor agrees to indemnify, hold harmless and defend, to the same extent and in the same manner as is set forth in Section 6(a), the Company, each of its directors, each of its officers who signs the Registration Statement or any New Registration Statement, each Person, if any, who controls the Company within the meaning of the Securities Act or the Exchange Act (collectively and together with an Indemnified Person, an "Indemnified Party"), against any Claim or Indemnified Damages to which any of them may become subject, under the Securities Act, the Exchange Act or otherwise, insofar as such Claim or Indemnified Damages arise out of or are based upon any Violation, in each case to the extent, and only to the extent, that such Violation occurs in reliance upon and in conformity with written information about the Investor set forth on Exhibit B attached hereto and furnished to the Company by the Investor expressly for use in connection with such registration statement; and, subject to Section 6(d), the Investor will reimburse any legal or other expenses reasonably incurred by any Indemnified Party in connection with investigating or defending any such Claim; provided, however, that the indemnity agreement contained in this Section 6(b) and the agreement with respect to contribution contained in Section 7 shall not apply to amounts paid in settlement of any Claim if such settlement is effected without the prior written consent of the Investor, which consent shall not be unreasonably withheld; provided, further, however, that the Investor shall be liable under this Section 6(b) for only that amount of a Claim or Indemnified Damages as does not exceed the net proceeds to the Investor as a result of the sale of Registrable Securities pursuant to such Registration Statement. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such Indemnified Party and shall survive the transfer of the Registrable Securities by the Investor pursuant to Section 9.

c. Promptly after receipt by an Indemnified Person or Indemnified Party under this Section 6 of notice of the commencement of any action or proceeding (including any governmental action or proceeding) involving a Claim, such Indemnified Person or Indemnified Party shall, if a Claim in respect thereof is to be made against any indemnifying party under this Section 6, deliver to the indemnifying party a written notice of the commencement thereof, and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume control of the defense thereof with counsel mutually satisfactory to the indemnifying party and the Indemnified Person or the Indemnified Party, as the case may be; provided, however, that an Indemnified Person or Indemnified Party shall have the right to retain its own counsel with the fees and expenses to be paid by the indemnifying party, if, in the reasonable opinion of counsel retained by the indemnifying party, the representation by such counsel of the Indemnified Person or Indemnified Party and the indemnifying party would be inappropriate due to actual or potential differing interests between such Indemnified Person or Indemnified Party and any other party represented by such counsel in such proceeding. The Indemnified Party or Indemnified Person shall cooperate fully with the indemnifying party in connection with any negotiation or defense of any such action or claim by the indemnifying party and shall furnish to the indemnifying party all information reasonably available to the Indemnified Party or Indemnified Person which relates to such action or claim. The indemnifying party shall keep the Indemnified Party or Indemnified Person fully apprised at all times as to the status of the defense or any settlement negotiations with respect thereto. No indemnifying party shall be liable for any settlement of any action, claim or proceeding effected without its written consent, provided, however, that the indemnifying party shall not unreasonably withhold, delay or condition its consent. No indemnifying party shall, without the consent of the Indemnified Party or Indemnified Person, consent to entry of any judgment or enter into any settlement or other compromise which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party or Indemnified Person of a release from all liability in respect to such claim or litigation. Following indemnification as provided for hereunder, the indemnifying party shall be subrogated to all rights of the Indemnified Party or Indemnified Person with respect to all third parties, firms or corporations relating to the matter for which indemnification has been made. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action shall not relieve such indemnifying party of any liability to the Indemnified Person or Indemnified Party under this Section 6, except to the extent that the indemnifying party is prejudiced in its ability to defend such action.

d. The indemnification required by this Section 6 shall be made by periodic payments of the amount thereof during the course of the investigation or defense, as and when bills are received or Indemnified Damages are incurred.

e. The indemnity agreements contained herein shall be in addition to (i) any cause of action or similar right of the Indemnified Party or Indemnified Person against the indemnifying party or others, and (ii) any liabilities the indemnifying party may be subject to pursuant to law.

7. CONTRIBUTION.

To the extent any indemnification by an indemnifying party is prohibited or limited by law, the indemnifying party agrees to make the maximum contribution with respect to any amounts for which it would otherwise be liable under Section 6 to the fullest extent permitted by law; provided, however, that: (i) no seller of Registrable Securities guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any seller of Registrable Securities who was not guilty of fraudulent misrepresentation; and (ii) contribution by any seller of Registrable Securities shall be limited in amount to the net amount of proceeds received by such seller from the sale of such Registrable Securities.

8. REPORTS AND DISCLOSURE UNDER THE SECURITIES ACTS.

With a view to making available to the Investor the benefits of Rule 144 promulgated under the Securities Act or any other similar rule or regulation of the SEC that may at any time permit the Investor to sell securities of the Company to the public without registration ("Rule 144"), the Company agrees, at the Company's sole expense, so long as the Investor owns Registrable Securities, to use commercially reasonable efforts to:

a. make and keep public information available, as those terms are understood and defined in Rule 144;

b. 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 so long as the Company remains subject to such requirements and the filing of such reports and other documents is required for the applicable provisions of Rule 144;

c. furnish to the Investor so long as the Investor owns Registrable Securities, promptly upon request, (i) a written statement by the Company that it has complied with the reporting and or disclosure provisions of Rule 144, the Securities Act and the Exchange Act, (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested to permit the Investor to sell such securities pursuant to Rule 144 without registration; and

d. take such additional action as is requested by the Investor to enable the Investor to sell the Registrable Securities pursuant to Rule 144, including, without limitation, delivering all such legal opinions, consents, certificates, resolutions and instructions to the Company's Transfer Agent as may be requested from time to time by the Investor and otherwise fully cooperate with Investor and Investor's broker to effect such sale of securities pursuant to Rule 144.

The Company agrees that damages may be an inadequate remedy for any breach of the terms and provisions of this Section 8 and that Investor shall, whether or not it is pursuing any remedies at law, be entitled to seek equitable relief in the form of a preliminary or permanent injunctions, without having to post any bond or other security, upon any breach or threatened breach of any such terms or provisions.

9. ASSIGNMENT OF REGISTRATION RIGHTS.

The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Investor. The Investor may not assign its rights under this Agreement without the written consent of the Company, other than to an affiliate of the Investor controlled by Jonathan Cope or Josh Scheinfeld, in which case the assignee must agree in writing to be bound by the terms and conditions of this Agreement.

10. AMENDMENT OF REGISTRATION RIGHTS.

No provision of this Agreement may be amended or waived by the parties from and after the date that is one Business Day immediately preceding the initial filing of the Registration Statement with the SEC. Subject to the immediately preceding sentence, no provision of this Agreement may be (i) amended other than by a written instrument signed by both parties hereto or (ii) waived other than in a written instrument signed by the party against whom enforcement of such waiver is sought. Failure of any party to exercise any right or remedy under this Agreement or otherwise, or delay by a party in exercising such right or remedy, shall not operate as a waiver thereof.

11. MISCELLANEOUS.

a. A Person is deemed to be a holder of Registrable Securities whenever such Person owns or is deemed to own of record such Registrable Securities. If the Company receives conflicting instructions, notices or elections from two or more Persons with respect to the same Registrable Securities, the Company shall act upon the basis of instructions, notice or election received from the registered owner of such Registrable Securities.

b. Any notices, consents, waivers or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile or email (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); or (iii) one (1) Business Day after deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses for such communications shall be:

If to the Company:

Brooklyn Immunotherapeutics, Inc.
140 58th Street
Building A, Suite 2100
Brooklyn, NY 11220
Telephone: (212) 582-1199
E-mail: hfederoff@brooklynitx.com
Attention: Howard J. Federoff, President & CEO

With a copy to (which shall not constitute notice or service of process):

K&L Gates LLP
1 Park Plaza, 12th Floor
Irvine, CA 92614
Telephone: (949) 623-35-92
E-mail: rema.awad@klgates.com
Attention: Rema Awad, Esq.

If to the Investor:

Lincoln Park Capital Fund, LLC
440 North Wells, Suite 410
Chicago, IL 60654
Telephone: (312) 822-9300
Facsimile: (312) 822-9301
E-mail: jscheinfeld@lpcfunds.com/jcope@lpcfunds.com
Attention: Josh Scheinfeld/Jonathan Cope

With a copy to (which shall not constitute notice or service of process):

Dorsey & Whitney LLP
51 West 52nd Street
New York, NY 10019
Telephone: (212) 415-9214
Facsimile: (212) 953-7201
E-mail: marsico.anthony@dorsey.com
Attention: Anthony J. Marsico, Esq.

or at such other address and/or facsimile number and/or to the attention of such other person as the recipient party has specified by written notice given to each other party three (3) Business Days prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent, waiver or other communication, (B) mechanically or electronically generated by the sender's facsimile machine or email account containing the time, date, recipient facsimile number or email address, as applicable, or (C) provided by a nationally recognized overnight delivery service, shall be rebuttable evidence of personal service, receipt by facsimile or email, or receipt from a nationally recognized overnight delivery service in accordance with clause (i), (ii) or (iii) above, respectively.

c. The corporate laws of the State of Delaware shall govern all issues concerning the relative rights of the Company and its stockholders. All other questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of Illinois, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Illinois or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Illinois. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting the State of Illinois, County of Cook, for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

d. This Agreement and the Purchase Agreement constitute the entire agreement among the parties hereto with respect to the subject matter hereof and thereof. There are no restrictions, promises, warranties or undertakings among the parties hereto, other than those set forth or referred to herein and therein. This Agreement and the Purchase Agreement supersede all prior agreements and understandings among the parties hereto with respect to the subject matter hereof and thereof.

e. This Agreement is intended for the benefit of the parties hereto and any permitted successors and assigns and, except as set forth in Section 9, is not for the benefit of, nor may any provision hereof be enforced by, any other Person.

f. The headings in this Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

g. This Agreement may be executed in identical counterparts, each of which shall be deemed an original but all of which shall constitute one and the same agreement. This Agreement, once executed by a party, may be delivered to the other party hereto by facsimile transmission or by e-mail in a ".pdf" format data file of a copy of this Agreement bearing the signature of the party so delivering this Agreement.

h. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

i. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent and no rules of strict construction will be applied against any party.

*** Signature Page Follows ***

IN WITNESS WHEREOF, the parties have caused this Registration Rights Agreement to be duly executed as of day and year first above written.

THE COMPANY:

BROOKLYN IMMUNOTHERAPEUTICS, INC.

By: /s/ Howard Federoff
Name: Howard Federoff
Title: President & Chief Executive Officer

BUYER:

LINCOLN PARK CAPITAL FUND, LLC
BY: LINCOLN PARK CAPITAL, LLC
BY: ROCKLEDGE CAPITAL CORPORATION

By: /s/ Josh Scheinfeld
Name: Josh Scheinfeld
Title: President

EXHIBIT A

TO REGISTRATION RIGHTS AGREEMENT

FORM OF NOTICE OF EFFECTIVENESS OF REGISTRATION STATEMENT

[Date]

[NAME/ADDRESS]

Re: Brooklyn ImmunoTherapeutics, Inc.

Ladies and Gentlemen:

We are counsel to Brooklyn ImmunoTherapeutics, Inc., a Delaware corporation (the "Company"), and have represented the Company in connection with that certain Purchase Agreement, dated as of April 26, 2021 (the "Purchase Agreement"), entered into by and between the Company and Lincoln Park Capital Fund, LLC (the "Buyer"), pursuant to which the Company has issued to the Buyer an aggregate of 56,041 shares of the Company's common stock, par value $0.005 per share (the "Common Stock"), and may in the future issue and sell to the Buyer shares of Common Stock having an aggregate purchase price of up to Twenty Million Dollars ($20,000,000) in accordance with the terms of the Purchase Agreement. In connection with the transactions contemplated by the Purchase Agreement, the Company has registered with the U.S. Securities and Exchange Commission (the "SEC") the following shares of Common Stock:

(1) up to [_____] shares of Common Stock to be issued to the Buyer upon purchase by the Buyer from the Company from time to time (the "Purchase Shares"); and

(2) 56,041 shares of Common Stock that have been issued to the Buyer as an initial commitment fee (the "Commitment Shares").

Pursuant to the Purchase Agreement, the Company also has entered into a Registration Rights Agreement, dated as of April 26, 2021, with the Buyer (the "Registration Rights Agreement") pursuant to which the Company agreed, among other things, to register the Purchase Shares and the Commitment Shares under the Securities Act of 1933, as amended (the "Securities Act"). In connection with the Company's obligations under the Purchase Agreement and the Registration Rights Agreement, on [_____], 2021, the Company filed a Registration Statement (File No. 333-[_____]) (the "Registration Statement") with the SEC relating to the resale of the Purchase Shares and the Commitment Shares by the Buyer.

In connection with the foregoing, we advise you that the SEC has entered an order declaring the Registration Statement effective under the Securities Act at [_____] [A.M./P.M.] on [_____], 202[_] and we have no knowledge, after review of the stop order notification website maintained by the SEC, that any stop order suspending its effectiveness has been issued or that any proceedings for that purpose are pending before, or threatened by, the SEC. Accordingly, the Purchase Shares and the Commitment Shares may be resold by the Buyer under the Securities Act pursuant to the Registration Statement and may be issued without any restrictive legend or stop transfer orders maintained against them.

Very truly yours,

[_____]

By: _____

cc: Lincoln Park Capital Fund, LLC

EXHIBIT B

TO REGISTRATION RIGHTS AGREEMENT

Information About The Investor Furnished To The Company By The Investor
Expressly For Use In Connection With The Registration Statement

Information With Respect to Lincoln Park Capital

As of the date of the Purchase Agreement, Lincoln Park Capital Fund, LLC, beneficially owned 56,041 shares of our common stock. Josh Scheinfeld and Jonathan Cope, the Managing Members of Lincoln Park Capital, LLC, the manager of Lincoln Park Capital Fund, LLC, are deemed to be beneficial owners of all of the shares of common stock owned by Lincoln Park Capital Fund, LLC. Messrs. Cope and Scheinfeld have shared voting and investment power over the shares being offered under the prospectus filed with the SEC in connection with the transactions contemplated under the Purchase Agreement. Lincoln Park Capital, LLC is not a licensed broker dealer or an affiliate of a licensed broker dealer.

Exhibit 10.3

EXCLUSIVE LICENSE AGREEMENT

THIS EXCLUSIVE LICENSE AGREEMENT (this "*Agreement*") is entered into as of this 26th day of April, 2021 (the "*Effective Date*"), by and between Factor Bioscience Limited, a company organized and existing under the laws of Ireland ("*Factor*"), Novellus Therapeutics Limited, a company organized and existing under the laws of Ireland ("*Novellus*") (each of Factor and Novellus being referred to in this Agreement individually as a "*Licensor*" and collectively as the "*Licensors*"), and Brooklyn Immunotherapeutics LLC, a limited liability company organized and existing under the laws of the State of Delaware ("*Licensee*"). Factor, Novellus and Licensee may each be referred to in this Agreement individually as a "*Party*" and collectively as the "*Parties*."

WHEREAS, Factor and Licensee entered into that certain Option Agreement, effective as of December 9, 2020, as amended by Factor and Licensee on April 9, 2021 (the "*Factor Option Agreement*"), pursuant to which Factor granted Licensee an option to negotiate an exclusive license under certain of the Licensed Technology (as defined herein) in the Field (as defined herein);

WHEREAS, Novellus and Licensee entered into that certain Option Agreement, effective as of December 9, 2020, as amended by Novellus and Licensee on April 9, 2021 (the "*Novellus Option Agreement*"), pursuant to which Novellus granted Licensee an option to negotiate an exclusive license under certain of the Licensed Technology in the Field;

WHEREAS, Licensee desires to receive from each Licensor certain rights to the Licensed Technology in order that Licensee may develop and commercialize Licensed Products (as defined herein) in the Field; and

WHEREAS, in furtherance of the foregoing, Licensee exercised the options in accordance with the Factor Option Agreement and the Novellus Option Agreement, and each Licensor agrees to grant such rights to Licensee, and Licensee agrees to use Commercially Reasonable Efforts (as defined herein) to develop and make commercially available Licensed Products in accordance with this Agreement for commercial exploitation in the Field and in the Territory (as defined herein).

NOW, THEREFORE, in consideration of the mutual covenants contained in this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

Section 1
Definitions

Unless otherwise specifically provided herein, the following terms, when used with a capital letter at the beginning, will have the following meanings:

1.1. "*Affiliate*" means, with respect to a 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 this definition, the word "control" (including, with correlative meaning, the terms "controlled by" or "under 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 fifty percent (50%) or more of the voting stock of such entity, or by contract or otherwise. For the purposes of this definition and this Agreement, and for the avoidance of doubt, Factor Bioscience Limited, Factor Bioscience Pty Ltd, Factor Bioscience LLC, and Factor Bioscience Inc. (collectively, the "*Factor Bio Entities*") are each deemed not to be Affiliates of any of Novellus Therapeutics Limited, Novellus LLC, and Novellus, Inc. (collectively, the "*Novellus Entities*"), and each of the Novellus Entities is deemed not to be an Affiliate of any of the Factor Bio Entities.

1.2. "*Agreement*" has the meaning set forth in the Preamble.

1.3. "*Applicable Law*" means all statutes, ordinances, regulations, rules or orders of any kind whatsoever of any agency, bureau, branch, office, court, commission, authority, department, ministry, official or other instrumentality of, or being vested with public authority under any law of, any country, state or local authority or any political subdivision thereof, or any association of countries that may be in effect from time to time and applicable to the activities contemplated by this Agreement.

1.4. "*Auxiliary Technologies*" means (a) any one or more of the technologies set forth on Exhibit 1.4, and (b) any Improvements.

1.5. "*Auxiliary Technology Patents*" means (a) the patents and patent applications set forth on Exhibit 1.5, (b) any reissue, divisional, continuation, reexamination, renewal, extension or supplementary protection certificate for each of the patents and patent applications set forth on Exhibit 1.5, (c) the Improvement Patents, and (d) (i) any reissue, divisional, continuation, reexamination, renewal, or extension but only to the extent that each of the foregoing in clauses (a), (b), (c), and (d) (i) is Controlled by a Licensor, (ii) includes at least one claim that is directed to subject matter disclosed in the patents and patent applications described in clause (a) above, and claims priority to such patents and patent applications, and (iii) is necessary or useful to Exploit the Licensed Products in the Field, and (e) all foreign patents and patent applications corresponding to or claiming priority to the foregoing specific patents and patent applications described in clause (a), clause (b), clause (c) and clause (d)(i) above. For the avoidance of doubt, the Auxiliary Technology Patents do not include any patents not explicitly described in the preceding sentence.

1.6. "*Cell Line*" means a human pluripotent stem cell line that is made using the mRNA cell reprogramming methods Covered in the Licensed Patents and containing one or more Licensee Edits to be identified by Licensee in accordance with Section 4.1.

1.7. "*Combination Product*" shall mean any product that is comprised of a Licensed Product and one or more other products or technology that is not Covered by the Licensed Technology or Auxiliary Technology (the "*Other Agent(s)*").

1.8. "*Commercially Reasonable Efforts*" means, with respect to the performance of research, development and/or commercialization activities hereunder, including with respect to the research, development and/or commercialization of any Licensed Product by or on behalf of Licensee, the carrying out of such activities using commercial and business efforts and resources comparable to the efforts and resources that a party of similar size would typically devote to products of similar market potential at a similar stage in development or product life, taking into account all scientific, commercial, and other factors that such a party would take into account, including issues of safety, toxicity and efficacy, exclusivity and third party patent position, as well as regulatory requirements of the FDA or similar government agencies.

1.9. "*Confidential Information*" means all Information disclosed by one Party to the other during the negotiation of or under this Agreement in any manner, whether orally, visually, electronically, in writing or in other tangible or intangible form, that relates to Licensed Technology, the Auxiliary Technologies, Cell Line, Licensee Edits, Licensed Products, or this Agreement, unless such information is subject to an exception described in Section 8.6.

1.10. "*Control*" or "*Controlled by*" means, in the context of a license to or ownership of Intellectual Property, the ability on the part of a Party to grant access to or a license or sublicense of such Intellectual Property as provided for herein without violating the terms of any agreement or other arrangement between such Party and any third party existing at the time such Party would be required hereunder to grant such access or license or sublicense.

1.11. "*Cover*" or "*Covered*" means that the use, manufacture, sale, offer for sale, research, development, commercialization, importation or other commercial exploitation of the subject matter in question by an unlicensed entity: (a) would infringe an issued Valid Claim (or, in the case of a pending Valid Claim that has not yet issued, would infringe such Valid Claim if it were to issue in its then-current form) of a Licensed Patent or an Auxiliary Technology Patent, or (b) incorporates, uses, or otherwise relies upon the Licensed Technology or the Auxiliary Technologies.

1.12. "*Edit*" means one or more mutations set forth in Exhibit 1.12 that inactivate a specific combination of human genes and/or insert one or more nucleic acid sequences that encode a specific combination of biomolecules that are each identified by a GenBank accession number or similar information, or by their amino acid or nucleic acid sequences.

1.13. "*Effective Date*" has the meaning set forth in the Preamble.

1.14. "*Exploit*" and "*Exploitation*" mean to develop, make, have made, manufacture, research, use, sell, have sold, offer for sale, commercialize, distribute, import and/or export.

1.15 "*Familial Amyloid Disease Product*" means a Covered mRNA product for use in the Field to be identified by Licensee in accordance with Section 4.1.

1.16 "*FDA*" means the United States Food and Drug Administration or any successor agency thereto.

1.15. "*Field*" means (a) with respect to an HSC Product, the Exploitation of such HSC Product for the treatment of cancer, rare blood disorders, and infectious diseases of the blood in humans; (b) with respect to an MSC Product, the Exploitation of such MSC Product for the treatment of cancer in humans; (c) with respect to a Sickle-Cell Product, the Exploitation of such Sickle-Cell Product for the treatment of sickle-cell disease or beta thalassemia in humans; (d) with respect to a TIL Product, the Exploitation of such TIL Product for the treatment of cancer in humans; (e) with respect to a T-Cell Product, the Exploitation of such T-Cell Product for the treatment of cancer in humans; (f) with respect to an Inherited Retinal Disorders Product, the Exploitation of such Inherited Retinal Disorders Product for the treatment of gene-mutation associated loss of vision characterized by defects in the retinal photoreceptors and/or retinal pigment epithelial cells and owing to mutations in *ABCA4* in humans; (g) with respect to a Non-syndromic Hearing Loss Product, the Exploitation of such Non-syndromic Hearing Loss Product for the treatment of gene-mutation associated loss of hearing characterized by diminished and/or absent hearing function owing to a mutation in *GJB2, SLC26A4, MYO15A,* or *OTOF* in humans; and (h) with respect to a Familial Amyloid Disease Product, the Exploitation of such Familial Amyloid Disease Product for the treatment of gene-mutation associated amyloidosis owing to mutations in *TTR,* encoding transthyretin in humans.

1.16. "*First Commercial Sale*" means the first arm's-length sale or other transfer for value of a Licensed Product by or on behalf of Licensee, or an Affiliate or sublicensee of Licensee, to an unrelated third party, in the Territory, after Regulatory Approval.

1.17. "*Hematopoietic Stem Cells*" or "*HSCs*" means a population of multipotent hematopoietic stem cells that are capable of differentiating into cells of both the myeloid and lymphoid lineages.

1.18. "*HSC Product*" means a Covered allogeneic or autologous cell therapy product comprising HSCs for use in the Field to be identified by Licensee in accordance with Section 4.1. HSC Products expressly exclude any product comprising Covered cells that are not HSCs except where such cells are present in inconsequential amounts and do not contribute appreciably to the potency, function, activity, or stability of the product.

1.19. "*Improvement(s)*" means any invention, discovery, advancement, development, or creation which: (a) is invented, developed, authored, created, or reduced to practice by or on behalf of Licensee or an Affiliate of Licensee (or Licensee's or its Affiliate's personnel or agents, including any employee, officer, advisor, or independent contractor employed or engaged by (or otherwise having an obligation to assign inventions to) Licensee or its Affiliates); (b) is not an Independent Invention; and (c) meets at least one of the following criteria: (i) is an improvement or modification to the Licensed Technology, the Auxiliary Technologies or to the Cell Line; (ii) utilizes, incorporates, or reads upon any element of the Licensed Technology or the Auxiliary Technologies or is invented, developed, authored, created, or reduced to practice using the Licensed Technology or the Auxiliary Technologies; or (iii) is invented, developed, authored, created, or reduced to practice by or on behalf of Licensor or an Affiliate of Licensor (or Licensor's or its Affiliate's personnel or agents, including any employee, officer, advisor, or independent contractor employed or engaged by (or otherwise having an obligation to assign inventions to) Licensor or its Affiliates).

1.20. "*Improvement Patents*" means the patents and patent applications claiming Improvements, and any reissue, divisional, continuation, continuation-in-part or reexamination certificate thereof. During the Term, all Improvement Patents shall be set forth in Exhibit 1.20.

1.21. "*IND*" means an Investigational New Drug Application filed with the FDA required for the initiation of clinical trials in humans for the applicable Licensed Product in the United States (or the foreign equivalent thereof).

1.22. "*Independent Invention*" means any invention, discovery, advancement, development, or creation, which: (a) is invented, developed, authored, created, or reduced to practice by or on behalf of Licensee or an Affiliate of Licensee (or the personnel or agents of Licensee or an Affiliate of Licensee, including any employee, officer, advisor, or independent contractor employed or engaged by (or otherwise under an obligation to assign inventions to) Licensee or an Affiliate of Licensee); (b) does not utilize, incorporate, or read upon any element of the Licensed Technology, Auxiliary Technology and is not Covered by a Valid Claim; and (c) is not invented, developed, authored, created, or reduced to practice by Licensor (or Licensor's personnel or agents, including any employee, officer, advisor, or independent contractor employed or engaged by (or otherwise under an obligation to assign inventions to) Licensor).

1.23. "*Information*" means all information, know-how, data, results, technology, materials, business or financial information of any type whatsoever, in any tangible or intangible form, provided by or on behalf of one Party to the other Party, either in connection with the discussions and negotiations pertaining to this Agreement or in the course of performing this Agreement, or that otherwise relates to the Licensed Technology, the Auxiliary Technologies, Licensee Edits or Cell Line, whether disclosed orally, visually, electronically, in writing or in other tangible or intangible form, and which may include data, knowledge, practices, processes, ideas, research plans, antibodies, small molecules, compounds, targets, biological and chemical formulations, structures and designs, laboratory notebooks, proof of concept and pre-clinical studies, formulation or manufacturing processes and techniques, scientific, manufacturing, marketing and business plans, and financial and personnel matters relating to the disclosing Party or to its present or future products, sales, suppliers, customers, employees, investors or businesses.

1.24. *"Inherited Retinal Disorders Product"* means a Covered mRNA product for use in the Field to be identified by Licensee in accordance with Section 4.1.

1.25. "*Intellectual Property*" means all (a) patents, patent applications, patent disclosures and all related continuation, continuation-in-part, divisional, reissue, reexamination, post-grant proceeding, utility model, certificate of invention and design patents, applications, registrations and applications for registration, and any equivalent in any jurisdiction; (b) trademarks, service marks, trade dress, Internet domain names, logos, trade names and corporate names and registrations and applications for registration thereof; (c) copyrights and registrations and applications for registration thereof, including all moral rights; (d) Information, inventions, trade secrets and confidential information, whether patentable or non-patentable and whether or not reduced to practice, know-how, show how, manufacturing and product processes and techniques, research and development information, notebooks, formulae, diagrams, technical and engineering specifications, business and marketing plans and customer and supplier lists and other information; (e) other proprietary rights relating to any of the foregoing (including remedies against infringement thereof and rights of protection of interest therein under the laws of all jurisdictions); and (f) copies and tangible embodiments thereof.

1.26. "*Licensed Know-How*" means all unpatented inventions, technology, methods, materials (including biological and pharmaceutical materials), know-how, studies, pre-clinical and clinical data (including toxicology and safety data), tests and assays, reports, manufacturing processes, regulatory filings (including drafts) and approvals and other information Controlled by one or both Licensors (a) as of the Effective Date or (b) which is created or acquired by Licensors in the course of carrying out its obligation under this Agreement, in each case that relates to the subject matter of the Licensed Patents or the Auxiliary Technology Patents and is necessary or useful to make, use or sell Licensed Products in the Field in the Territory.

1.27. "*Licensed Patents*" means (a) the patents and patent applications set forth on Exhibit 1.27, and (b) (i) any reissue, divisional, continuation, reexamination, renewal, extension, supplementary protection certificate, or foreign counterpart for each of the patents and patent applications set forth on Exhibit 1.27, (ii) includes at least one claim that is directed to subject matter disclosed in the patents and patent applications described in clause (a) above, and claims priority to such patents and patent applications, and (iii) is necessary or useful to Exploit the Licensed Products in the Field. For the avoidance of doubt, the Licensed Patents do not include any patents not explicitly described in the preceding sentence.

1.28. "*Licensed Product"* means any HSC Product, MSC Product, Sickle-Cell Product, TIL Product, T-Cell Product, Inherited Retinal Disorders Product, Non-syndromic Hearing Loss Product, or Familial Amyloid Disorders Product.

1.29. "*Licensed Technology*" means the Licensed Patents, Licensed Know-How, Cell-Line, and Improvement Patents, if any, all to the extent owned or Controlled by one or both Licensors and, in each case, that are necessary for Licensee to Exploit the Licensed Products in the Field.

1.30. "*Licensee Edits*" means the Edits to be identified by Licensee in accordance with Section 4.1 and set forth Exhibit 1.30, as the same may be amended in accordance with Section 4.1.

1.31. "*Mesenchymal Stem Cells*" or "*MSCs*" means a population of multipotent mesenchymal stem cells or MSC-like stem cells that are capable of differentiating into osteoblasts, chondrocytes, and adipocytes, and that are derived from the Cell Line.

1.32. "*MSC Product*" means a Covered allogeneic or autologous cell therapy product comprising MSCs for use in the Field to be identified by Licensee in accordance with Section 4.1. MSC Products expressly exclude any product comprising Covered cells that are not MSCs except where such cells are present in inconsequential amounts and do not contribute appreciably to the potency, function, activity, or stability of the product

1.33. "*Net Sales*" means all gross revenue collected from or through Licensee, its Affiliates, or their sublicensees from any Licensed Product (excluding compassionate use and promotional samples), including sales, licensing, leasing or other commercial exploitation of Licensed Products. Net Sales excludes the following items (but only as they pertain to the making, using, importing or selling of the applicable Licensed Product, are included in gross revenue, and are separately billed): (a) import, export, excise and sales taxes, custom duties, value added taxes, tariffs or other fees leveled by government authorities, and other consumption taxes similarly incurred or other governmental charges levied to the extent included on the bill or invoice or as a separate item; (b) costs of insurance, packing, and transportation from the place of manufacture to the customer's premises or point of use; (c) credit for returns, allowances, or trades, including credits or allowances additionally granted upon rejections or recalls, claims returns pursuant to agreements (including, without limitation, managed care agreements), warranty claims, or claims allowed under government regulations, to the extent actually allowed and taken; (d) charge-back payments, and rebates actually granted or administrative fees actually booked to trade customers, patients (including those in the form of a coupon or voucher), managed health care organizations, pharmaceutical benefit managers, group purchasing organizations and national, state or local governments, and to the agencies, purchasers and reimbursers of managed health organizations, pharmaceutical benefit managers, group purchasing organizations, or federal, state or local governments; *provided, however*, that in each case such amounts shall be applied in a normal and customary manner with respect to other similarly situated products or services of the selling party and not applied disproportionately to the Licensed Product; and (e) Net Sales at transfer prices to a control person of the Licensee (or any member of the consolidated group of such control person), or pricing between subsidiaries of a consolidated group of such control person (including the Licensee as a member of such consolidated group), but shall include the first sale or other commercial disposition of the applicable Licensed Product to an unaffiliated third party; all as determined in accordance with the selling party's usual and customary accounting methods, which are in accordance with U.S. generally accepted accounting principles (GAAP), consistently applied

1.34. "*Non-syndromic Hearing Loss (NSHL) Product*" means a Covered mRNA product for use in the Field to be identified by Licensee in accordance with Section 4.1.

1.35. "*Party*" or "*Parties*" has the meaning set forth in the Preamble.

1.36. "*Patent Expenses*" shall mean all fees, costs, and expenses (including attorneys' fees) paid or incurred in the preparation, filing, prosecution, issuance, and maintenance of the Licensed Patents and Auxiliary Technology Patents.

1.37. "*Pediatric Priority Review Voucher*" or "*PRV*" means a priority review voucher issued by FDA or otherwise under the authority of the United States Department of Health and Human Services to Licensee or any of its Affiliates or sublicensees as the sponsor of a rare pediatric disease or neglected tropical disease product application, that entitles the holder of such voucher to priority review of a single human drug application submitted under Section 505(b)(1) or 505(b)(2) of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301 et seq., as amended from time to time, together with any rules, regulations and requirements promulgated thereunder or Section 351(a) of the United States Public Health Service Act, as further defined in the Federal Food, Drug, and Cosmetic Act.

1.38. "*Phase 1 Clinical Trial*" means a clinical trial generally consistent with 21 CFR §312.21(a) that is required for receipt of clearance or marketing authorization of a Licensed Product from the applicable Regulatory Authority and which is conducted to evaluate safety of a Licensed Product for a particular indication or indications in healthy subjects.

1.39. "*Phase 2a Clinical Trial*" means a clinical trial generally consistent with 21 CFR §312.21(b) that is required for receipt of clearance or marketing authorization of a Licensed Product from the applicable Regulatory Authority and which is conducted to assess the optimal manner of use of such a Licensed Product (dose and dose regimens) and to better determine safety and efficacy of such a Licensed Product.

1.40. "*Phase 2b Clinical Trial*" means a clinical trial generally consistent with 21 CFR §312.21(b) that is required for receipt of clearance or marketing authorization of a Licensed Product from the applicable Regulatory Authority and which is conducted to assess the optimal manner of use of such a Licensed Product (dose and dose regimens) for a particular indication or indications in patients with the disease or condition under study.

1.41. "*Phase 3 Clinical Trial*" means a clinical trial generally consistent with 21 CFR §312.21(c) that is required for receipt of clearance or marketing authorization of a Licensed Product from the applicable Regulatory Authority and which is conducted after preliminary evidence suggesting effectiveness of the Licensed Product has been obtained, and is intended to gather additional information to evaluate the overall benefit-risk relationship of the Licensed Product for a particular indication and provide an adequate basis for physician labeling.

1.42. "*Pivotal Clinical Trial*" means a Phase 3 Clinical Trial, or a Phase 2b Clinical Trial for which the applicable Regulatory Authority has determined that the data generated in such Phase 2b Clinical Trial would be sufficient, depending on its outcome, to support the Regulatory Approval for the applicable Licensed Product.

1.43. "*Regulatory Approval*" means the approval (including label expansions to include additional indications), license, registration, clearance or authorization of the applicable Regulatory Authority necessary for the lawful marketing, commercialization and sale of a Licensed Product in a country or jurisdiction of the Territory.

1.44. "*Regulatory Authority*" means the FDA or any similar foreign national governmental regulatory authority involved in the granting of authorization to conduct clinical trials or Regulatory Approvals for the manufacture, sale, pricing and/or reimbursement of a Licensed Product in the Field.

1.45. "*Sickle-Cell Product*" means a Covered allogeneic or autologous (*ex vivo*) cell therapy product comprising HSCs for use in the Field to be identified by Licensee in accordance with Section 4.1. Sickle-Cell Products expressly exclude any product comprising Covered cells that are not HSCs except where such cells are present in inconsequential amounts and do not contribute appreciably to the potency, function, activity, or stability of the product.

1.46. "*Sublicense Fees*" means consideration paid to Licensee or its Affiliates as consideration for or in connection with a sublicense of, or other right, license, option, privilege, or immunity with respect to, any Licensed Product or any of the rights to the Licensed Technology or the Auxiliary Technologies granted to Licensee hereunder, including without limitation license fees, upfront payments, milestone payments, and royalties payable on sales of Licensed Products in excess of the Royalty on Net Sales payable hereunder, but specifically excluding the Royalty on Net Sales payable hereunder. For the avoidance of doubt, Sublicense Fees shall include payments made by any sublicensee to Licensee that are required by an agreement between Licensee and a sublicensee, wherein said agreement includes the granting of any rights in any Licensed Product or the sublicensing of any rights in the Licensed Technology or the Auxiliary Technologies, including, up-front payments, milestone payments, and royalty payments payable on sales of Licensed Products in excess of the Royalty on Net Sales payable hereunder.

1.47. "*T-Cells*" means a population of CD8+/CD4- αβ T lymphocyte cells.

1.48. "*T-Cell Product*" means a Covered autologous cell therapy product not derived from induced pluripotent stem cells comprising T-Cells for use in the Field to be identified by Licensee in accordance with Section 4.1. A T-Cell Product expressly excludes any product comprising Covered cells that are not T-Cells except where such cells are present in inconsequential amounts and do not contribute appreciably to the potency, function, activity, or stability of the product.

1.49. "*Term*" has the meaning set forth in Section 7.1.

1.50. "*Territory*" means the Universe.

1.51. "*TIL Product*" means a Covered autologous cell therapy product not derived from induced pluripotent stem cells comprising TILs for use in the Field to be identified by Licensee in accordance with Section 4.1. TIL Products expressly exclude any product comprising Covered cells that are not TILs except where such cells are present in inconsequential amounts and do not contribute appreciably to the potency, function, activity, or stability of the product.

1.52. "*Tumor-Infiltrating Lymphocytes*" or "*TILs*" means a population of tumor-infiltrating lymphocytes.

1.53. "*Valid Claim*" means: (a) any currently pending claim of a patent application within the Licensed Patents or Auxiliary Technology Patents, which has not been abandoned; or (b) a claim of a granted and unexpired and unlapsed patent within the Licensed Patents or Auxiliary Technology Patents that (i) has not been revoked, held invalid, or declared unpatentable or unenforceable by a decision of a court or other governmental agency of competent jurisdiction that is unappealable or unappealed in the time allowed for appeal; (ii) has not been rendered or admitted to be invalid, abandoned or unenforceable through reissue or disclaimer or otherwise; or (iii) has not been lost through an interference proceeding. However, if a claim of a pending patent application shall not have issued within seven (7) years after the filing date of such pending patent application, such claim shall not constitute a Valid Claim for purposes of this Agreement.

Section 2
Licenses

2.1. *License Grant*.

Subject to the terms and conditions of this Agreement (including the terms and provisions set forth in Section 2.4 and Section 5.2), the Licensors hereby grant to Licensee an exclusive (even as to the Licensors), non-transferrable (except in accordance with Section 11.2), royalty-bearing license, with the right to grant sublicenses pursuant to Section 2.2, under the Licensed Technology, the Auxiliary Technologies, and the Auxiliary Technology Patents to Exploit Licensed Products in the Territory in the Field during the Term.

2.2. *Sublicensing*.

Licensee may sublicense the rights granted to it under Section 2.1 (i.e., absent Licensor's express prior written consent, no sublicensee will have any further right to grant sublicenses) to third party sublicensees, so long as: (a) the sublicense is royalty-bearing and in writing; (b) the terms of the sublicense agreement are consistent with the terms and conditions of this Agreement, including, without limitation, Section 7.7; (c) the sublicense was negotiated by Licensee in good faith, for a proper commercial purpose and on reasonable arm's-length commercial terms; (d) the sublicense agreement names the Licensors as third-party beneficiaries thereof; (e) the sublicensee has, or has the ability to acquire, adequate resources (including scientific, technical and financial) to perform its obligations under such sublicense, as reasonably determined by Licensee at the time of entry into the sublicense; and (f) a complete, confidential copy of the sublicense agreement and any amendments thereto are provided to the Licensors within thirty (30) days of the execution of said sublicense agreement or any such amendments thereto. In each case, Licensee will be responsible for the performance of its sublicensees relevant to this Agreement, including, without limitation, making any payments provided for hereunder. Subject to Section 8.6, Licensee will provide the Licensors with a complete, confidential copy of each such sublicense agreement executed by Licensee and any amendments thereto, and will promptly notify the Licensors of the termination of any such sublicense.

2.3. *Rights in Improvements, Improvement Patents and Independent Inventions*.

(a) Improvements shall be automatically included as part of the Auxiliary Technologies, and Improvement Patents shall be automatically included as part of the Auxiliary Technology Patents. Licensee and the Licensors agree promptly to update Exhibit 1.20 of this Agreement attached hereto upon written request by either Party from time to time, to reflect the inclusion of such Improvement Patents in the Auxiliary Technology Patents. Each Party will use reasonable efforts to disclose to the other Party during the Term any and all Improvements and Improvement Patents and Licensee and the Licensors agree promptly to update Exhibit 1.20 upon written request by either Party from time to time, to reflect the inclusion of any Improvement Patents.

(b) Subject to the rights granted to Licensee in Section 2.1 and Section 2.2, Factor shall own, and Licensee shall assign and hereby does assign to Factor all right, title and interest in and to all Improvements and Improvement Patents, including all related certificates of correction, reissue certificates, and supplementary protection certificates, and all other rights granted under 35 U.S.C. § 307, 35 U.S.C. § 318, 35 U.S.C. § 328, and 35 U.S.C. § 254-257. Licensee shall execute and assist with any and all applications, assignments, or other instruments which Factor deems necessary to perfect the foregoing assignment and/or to evidence, apply for, obtain, maintain, defend or enforce patent or other intellectual property protection in any and all countries worldwide with respect to Improvements assigned to Factor as set forth above or to protect otherwise Factor's interest therein.

(c) Licensee shall own all right, title and interest in and to all Independent Inventions invented, developed, created, or reduced to practice by or on behalf of Licensee.

2.4. *Retained Rights; Requirements*.

2.4.1. *Retained Rights*.

Any and all licenses granted hereunder are subject to the Licensors' right to make and use, and to permit academic, government, and not-for-profit institutions or agencies to make and use the Licensed Technology, the Auxiliary Technologies, and the Auxiliary Technology Patents (a) both in the Field and outside of the Field for non-commercial research, academic, educational, and all other non-commercial purposes, and (b) outside of the applicable Field for all commercial and non-commercial purposes. To the extent Licensors are providing any of the above, Licensors will inform those third parties of the limits on the license and notify Licensee accordingly.

2.4.2. *Right to Publish*.

Subject to this Section 2.4.2, any and all licenses granted hereunder are subject to the right of the Licensors to review publication of scientific findings related to the Licensed Technology. If Licensee desires to submit any publication related to the Licensed Technology or that would otherwise disclose Confidential Information of a Licensor or any patentable information related to Licensed Technology, Licensee will provide the Licensors with prior written notice of such proposed publication and a copy of such proposed publication. The Licensors will use reasonable efforts to complete its review of such proposed publication promptly, and in any event will complete its review within thirty (30) days of receipt of the proposed publication. Licensors shall notify Licensee of any Licensor Confidential Information contained in such proposed publication and, in response to such notification, Licensee will promptly delete any Licensor Confidential Information from the proposed publication that a Licensor has identified during such thirty (30) day review period. A Licensor will have the right to delay submission of the proposed publication for up to an additional thirty (30) days if such Licensor determines, in its sole discretion, that publication of the proposed publication would have negative effects on such Licensor's patent rights. In the event that a Licensor decides to delay submission of the proposed publication, such Licensor shall inform Licensee of such decision within the initial thirty (30) day review period, and the Parties shall reasonably cooperate in order to resolve any concerns with the proposed publication within such review period (as may be extended if the publication has already been submitted).

2.4.3. *U.S. Federal Funding*.

Any and all licenses granted under patents supported by U.S. federal funding are subject to the rights, conditions, and limitations imposed by U.S. law (see 35 U.S.C. §202 et seq. and regulations pertaining thereto), including without limitation: (i) the royalty-free, non-exclusive license granted to the U.S. government; and (ii) the requirement that any products covered by an issued claim and sold in the U.S. will be substantially manufactured in the United States. Licensee agrees to inform the Licensors of those Improvements that are developed, reduced to practice or invented by Licensee's personnel and agents or the personnel or agents of Licensee's Affiliates (or that are Controlled by Licensee or Licensee's personnel or agents or the personnel or agents of Licensee's Affiliates) during the Term and beyond with the support (either entirely or in part) of U.S. federal funding, and to provide all information and documentation to Licensors that Licensor may request to secure patent rights for those inventions, including, but not limited to, grant numbers, contract numbers, and names of granting and contracting institutions and organizations.

Section 3
Reservation of Rights

3.1. *No Grant of Other Technology or Patent Rights*.

Each Party understands and acknowledges that the other Party owns its own Intellectual Property and all rights therein. Except as otherwise expressly provided in this Agreement, under no circumstances shall a Party hereto, as a result of this Agreement, obtain any ownership interest or license, or be deemed to obtain any ownership interest or license, in or to any technology, know-how, patents, patent applications, products, or materials of the other Party, including, but not limited to, items Controlled or developed by the other Party, at any time pursuant to this Agreement. This Agreement does not create, and shall under no circumstances be construed or interpreted as creating, an obligation on the part of either Party to grant any license to the other Party other than as expressly set forth herein. Any further contract or license agreement between the Licensor(s) and Licensee shall be in writing. No licenses are implied by Licensors to Licensee, except as specifically stated in this Agreement. Except as explicitly set forth in this Agreement, the Licensors shall not be deemed by estoppel or implication to have granted Licensee any license or other right to any Intellectual Property of the Licensors or their respective Affiliates.

3.2. *Reserved Rights*.

All rights and interests not expressly granted to Licensee under this Agreement are reserved by the Licensors (the "*Reserved Interests*") for themselves, their licensors, and other licensees and sublicensees. It shall not be a breach of this Agreement for a Licensor, acting directly or indirectly, to exploit its Reserved Interests in any manner anywhere in the Territory.

Section 4
Due Diligence; Technology Transfer

4.1. *Selection of Licensee Edits and Licensed Products*.

4.1.1 At any time on or before the date that is twenty four (24) months after the Effective Date, Licensee shall select up to ten (10) Licensee Edits from the Edits set forth in Exhibit 1.12, and the listing of Licensee Edits set forth in Exhibit 1.30 shall be amended to list the selected Licensee Edits.

4.1.2 At any time on or before the date that is twenty four (24) months after the Effective Date, Licensee shall select: (a) up to four (4) HSC Products, which HSC Products shall be identified in Exhibit 4.1.2; (b) up to four (4) MSC Products, which MSC Products shall be identified in Exhibit 4.1.2; (c) a Sickle-Cell Product, which Sickle-Cell Product shall be identified in Exhibit 4.1.2; (d) a TIL Product, which TIL Product shall be identified in Exhibit 4.1.2; (e) a T-Cell Product, which T-Cell Product shall be identified in Exhibit 4.1.2; (f) an Inherited Retinal Disorders Product, which Inherited Retinal Disorders Product shall be identified in Exhibit 4.1.2; (g) a Non-syndromic Hearing Loss Product, which Non-syndromic Hearing Loss Product shall be identified in Exhibit 4.1.2; and (h) a Familial Amyloid Disorders Product, which Familial Amyloid Disorders Product shall be identified in Exhibit 4.1.2.

4.1.3 At any time on or before the fourth anniversary of the Effective Date, Licensee may request in writing to replace one or more HSC Products and/or one or more MSC Products selected by Licensee in accordance with Section 4.1.2 with a new HSC Product and/or a new MSC Product, respectively, in which case, subject to Factor's prior written consent in the case of an HSC Product, and subject to Novellus's prior written consent in the case of an MSC Product, Exhibit 4.1.2 shall be amended by the Parties to identify the then-current HSC Products and/or MSC Products. Additionally, within forty eight (48) months of Licensee's payment of Payment One (as defined in Exhibit A), Licensee may request in writing to replace up to two (2) of the selected HSC Products and/or up to two (2) of the selected MSC Products with up to two (2) new HSC Products and/or up to two (2) new MSC Products, respectively and, in each case subject to Factor's prior written consent in the case of an HSC Product, and subject to Novellus's prior written consent in the case of an MSC Product, Exhibit 4.1.2 shall be amended by the Parties to identify the then-current HSC Products and/or MSC Products. Additionally, within forty eight (48) months of Licensee's payment of Payment Two (as defined in Exhibit A), Licensee may request in writing to replace up to one (1) of the selected HSC Products and/or up to one (1) of the selected MSC Product with a new HSC Product and/or a new MSC Product, respectively and, in each case subject to Factor's prior written consent in the case of an HSC Product, and subject to Novellus's prior written consent in the case of an MSC Product, Exhibit 4.1.2 shall be amended by the Parties to identify the then-current HSC Products and/or MSC Products. Upon their mutual written agreement, the Parties may decide to forgo the requirement for replacement of a Product or the time limit for such replacement. All of the above consents by Factor and/or Novellus shall not be unreasonably withheld or delayed.

4.1.4 Upon the Parties' amendment of Exhibits 1.12 and/or 4.1.2 to remove or replace a Licensee Edit, HSC Product or MSC Product in accordance with this Section 4.1, the removed or replaced Licensee Edit, HSC Product or MSC Product shall no longer be deemed a Licensee Edit, HSC Product or MSC Product hereunder.

4.2. *Regulatory Approval*.

Licensee will be solely responsible, at Licensee's expense, for securing any federal (or national in countries outside of the U.S.), state, or local Regulatory Approval from Regulatory Authorities necessary for commercial sale of Licensed Products, and Licensee shall deliver regular reports to each Licensor concerning such Regulatory Approvals in accordance with Section 5.3.2.

4.3. *Licensee Responsibilities*.

4.3.1 Licensee shall be solely responsible, at its expense, for the commercialization of Licensed Products in the Field in the Territory. Licensee will use Commercially Reasonable Efforts to diligently proceed to develop and make commercially available at least one HSC Product, one MSC Product, one Sickle-Cell Product, one TIL Product, one T-Cell Product, one Inherited Retinal Disorders Product, one Non-syndromic Hearing Loss Product and one Familial Amyloid Disorders Product in the Field in the United States or a major market country in Europe or Asia (i.e., the United Kingdom, France, Germany, China, or Japan; each a "*Major Market Country*").

4.3.2 Licensee shall provide the Licensors semi-annual written updates on Licensee's Licensed Product development and commercialization activities in the Field in the Territory, which updates shall be provided to the Licensors and at least every six (6) months during the Term and upon a Licensor's reasonable request therefor, and each Licensor shall have the right to reasonably request additional information regarding Licensee's progress in this regard. Such updates will include the activities undertaken by or on behalf of Licensee since the last report was delivered; and the activities to be undertaken by or on behalf of Licensee during the next twelve (12)-month period and the expected timing of such activities (including the estimated dates of initiation and completion of such activities).

4.4. *Licensee's Failure to Develop and/or Commercialize Licensed Products*.

4.4.1 In the event that a Licensor notifies Licensee in writing that such Licensor reasonably believes that, during any consecutive twelve (12)-month period during the Term, Licensee has failed to use its Commercially Reasonable Efforts to develop and/or make commercially available (as applicable) one or more Licensed Products in the Field in the United States or in a Major Market Country, then Licensee shall deliver to Licensor within sixty (60) days of receipt of such written notice copies of supporting documentation evidencing that Licensee has used Commercially Reasonable Efforts to develop such Licensed Product(s) and/or make such Licensed Product(s) commercially available in the Field in the United States or in a Major Market Country during such twelve (12)-month period. If Licensee fails to provide such supporting documentation within ninety (90) days after a Licensor's written request for it, or if, after examination of such supporting documentation provided by Licensee, such Licensor continues to reasonably believe that Licensee has failed to use its Commercially Reasonable Efforts to develop such Licensed Product(s) and/or make such Licensed Product(s) commercially available in the Field in the United States or a Major Market Country, then the Parties shall resolve such dispute in accordance with Section 10.

4.4.2 Licensee shall achieve the following milestones ("*Milestones*"): (a) within four (4) years after the Effective Date, Licensee shall submit an IND for at least one (1) MSC Product, and at least two (2) of an HSC Product, a Sickle-Cell Product, a TIL Product, a T-Cell Product, an Inherited Retinal Disorders Product, a Non-syndromic Hearing Loss Product, or a Familial Amyloid Disorders Product in the Field; and (b) within twenty four (24) months after submission of each such IND, Licensee shall have dosed the first patient with a Licensed Product in a Phase 1 Clinical Trial in the United States or in a Major Market Country. To the extent Licensee has not submitted an IND for at least one (1) MSC Product or at least two (2) of an HSC Product, a Sickle-Cell Product, a TIL Product, a T-Cell Product, an Inherited Retinal Disorders Product, a Non-syndromic Hearing Loss Product, or a Familial Amyloid Disorders Product within four (4) years after the Effective Date, Licensee may extend the time to file an IND for one (1) such Licensed Product for up to one (1) additional year. Pursuant to Section 7.2.3, Licensor may elect to terminate this Agreement in-part with respect to the applicable category of Licensed Product (e.g., a HSC Product, MSC Product, Sickle-Cell Product, TIL Product, T-Cell Product, Inherited Retinal Disorders Product, Non-syndromic Hearing Loss Product, or Familial Amyloid Disorders Product) if any of the following occur: (y) Licensee has not submitted an IND for the applicable HSC Product, MSC Product, Sickle-Cell Product, TIL Product, T-Cell Product, Inherited Retinal Disorders Product, Non-syndromic Hearing Loss Product or Familial Amyloid Disorders Product in the Field on or before the date that is four (4) years after the Effective Date; or (z) Licensee has not dosed a patient with the applicable HSC Product, MSC Product, Sickle-Cell Product, TIL Product, T-Cell Product, Inherited Retinal Disorders Product, Non-syndromic Hearing Loss Product, or Familial Amyloid Disorders Product in a Phase 1 Clinical Trial in the United States or in a Major Market Country on or before the date that is twenty four (24) months after submission of the IND.

4.5. *Licensor's Responsibilities and Technology Transfer*.

4.5.1 The Licensors will support and provide for the technical transfer of the Licensed Technology to Licensee starting within five (5) business days after the Effective Date to enable Licensee to understand and apply the Licensed Technology as contemplated hereunder to Exploit the Licensed Products, and, the Licensors will provide Licensee with information in the Licensors' possession, including copies of relevant documents in the format currently available and provide Licensee reasonable access to all relevant documentation in the Licensors' possession that such Licensors may deem reasonably necessary to enable Licensee's performance hereunder.

4.5.2 Upon Licensee's reasonable request during the Term, Licensor shall provide Licensee with information in Licensor's possession that is necessary or useful for Licensee to Exploit the Licensed Products.

4.5.3 Upon Licensee's reasonable request, Licensor shall provide Licensee periodic updates on Improvements, Improvement Patents, Licensed Know-How, Licensed Patents, Auxiliary Technology, and Auxiliary Technology Patents, which updates may include a description of (i) newly developed Improvements, Licensed Know-How, and Auxiliary Technology and (ii) the current status, strategy, and activities for the Improvement Patents, Licensed Patents, and Auxiliary Technology Patents, and which updates shall be prepared by Licensor(s) and provided to the Licensee at Licensee's cost and expense. Such updates may include the activities undertaken by or on behalf of Licensor since the last report was delivered; and the activities to be undertaken by or on behalf of Licensor during the next twelve (12)-month period and the expected timing of such activities (including the estimated dates of initiation and completion of such activities).

Section 5
Consideration; Records & Reports

5.1. *Upfront Consideration*.

In consideration for the rights granted by Licensor to Licensee under this Agreement, Licensee shall pay to Licensors the non-refundable, non-creditable Upfront Fee in the amounts set forth in Section 5.1 of Exhibit A , which full amount shall represent a mature obligation as of the Effective Date, shall not be contingent on any action or performance by the Licensors, and which Upfront Fee shall be payable in accordance with Section 5.1 of Exhibit A.

5.2. *Continuing Payments*.

In consideration for the rights granted by Licensor to Licensee under this Agreement, Licensee shall pay to Licensors the non-refundable, non-creditable Payment One and Payment Two in the amounts set forth in Section 5.2 of Exhibit A in accordance with Section 5.2 of Exhibit A. The full amount of Payment One shall represent a mature obligation as of the Effective Date and shall not be contingent on any action or performance by the Licensors. The Parties acknowledge and agree that the payments set forth in Section 5.2 of Exhibit A are independent payment obligations separate from the Upfront Fee and that Payment Two shall not represent a mature obligation as of the Effective Date. The Parties acknowledge and agree Licensee may terminate this Agreement in accordance with Section 7.4.1 after the payment of Payment One if Licensee, through Commercially Reasonable Efforts, decides, in its own discretion, to discontinue efforts to Exploit the Licensed Technology.

5.2.1. *Milestone Payments*.

For each Licensed Product, the first time each Milestone set forth in Section 5.2.1 of Exhibit A is achieved, whether by Licensee or by an Affiliate or sublicensee of Licensee, Licensee shall pay to the applicable Licensor the corresponding milestone payment set forth in Section 5.2.1 of Exhibit A (each, a "*Milestone Payment*"), such Milestone Payment to be made within forty five (45) days of the achievement of the applicable Milestone. For the avoidance of doubt, with respect to a Licensed Product, in the event that Licensee (or, as applicable Licensee's sublicensee) skips or avoids one or more Milestones (*e.g.*, by obtaining approval for a Licensed Product in the United States before initiating a Phase 3 Clinical Trial or a Pivotal Clinical Trial for such Licensed Product), then with respect to such Licensed Product, Licensee shall make the Milestone Payments associated with all such skipped or avoided Milestones upon the earlier of (a) achieving the next Milestone for such Licensed Product, or (b) the First Commercial Sale of such Licensed Product.

5.2.2. *Royalties on Net Sales*.

Commencing upon the First Commercial Sale of a Licensed Product in any country in the Territory, on a calendar quarter basis, Licensee shall pay to the designated Licensor a royalty equal to the percentage of Net Sales set forth in Section 5.2.2 of Exhibit A ("*Royalty on Net Sales*"). On a Licensed Product-by-Licensed Product and country-by-country basis, upon the later of the date: (a) of expiration of the last to expire of a Valid Claim or (b) that is ten (10) years from the date of First Commercial Sale of a Licensed Product in the subject country, Licensee shall have a non-exclusive license to Exploit the Licensed Know-How for the development and commercialization of Licensed Products in the applicable country in the Field, and the Royalty on Net Sales due thereafter under this Section 5.2.2 shall be reduced by fifty percent (50%) in the applicable country.

5.2.3 *Royalties on Sublicense Fees*.

Licensee shall, within thirty (30) days of receipt of any Sublicense Fees, pay to the applicable Licensor an amount equal to the percentage of said Sublicense Fees set forth in Section 5.2.3 of Exhibit A. For the purposes of this Section 5.2.3, the applicable Licensor to whom such percentage of Sublicense Fees shall be paid will correspond to the Licensor that Controls the rights to the applicable Licensed Product category giving rise to such Sublicense Fees. For the avoidance of doubt, unless otherwise agreed upon by the Parties in writing, Sublicense Fees received by Licensee or its Affiliates as consideration for a sublicense granted with respect to an MSC Product shall be shared with Novellus in accordance with this Section 5.2.3, and Sublicense Fees received by Licensee or its Affiliates as consideration for a sublicense granted with respect to an HSC Product, Sickle-Cell Product, TIL Product, T-Cell Product, Inherited Retinal Disorders Product, Non-syndromic Hearing Loss Product, and Familial Amyloid Disorders Product shall be shared with Factor in accordance with this Section 5.2.3.

5.2.4 *No Multiple Royalties*.

For the avoidance of doubt, no multiple Royalties on Net Sales will be required to be paid because a Licensed Product or its manufacture, use, sale or importation is covered by more than one (1) Valid Claim.

5.2.5 *Combination Products*.

A Licensed Product may be made, used, imported or sold in combination with or as part of Combination Products. Notwithstanding any other provision of this Agreement to the contrary, to calculate the value of Net Sales of Combination Products, the gross sales of such Combination Products will be multiplied by the fraction A/(A + B) where A is the average selling price of the Licensed Product when sold separately in finished form, and B is the average selling price of the Other Agent(s) when sold separately in finished form. Allowed deductions may then be subtracted from the proportion of gross sales attributable to the Licensed Product to compute Net Sales. In the event that such average sale price cannot be determined for both the Licensed Product and the Other Agent(s), Net Sales for such Combination Product shall be calculated using a mutually agreed method. Licensee shall propose a method to Licensors, which method shall be consistent with the method of accounting normally employed by Licensee in similar cases and Licensors shall review such method and either approve it or propose modifications. If the Parties are unable to agree on such method, Net Sales for purposes of determining payments due in respect of the Combination Product shall be based on the relative fair market value of the Licensed Product and such other Agent(s), which relative fair market value shall be determined in accordance with the provisions of Section 10.

5.2.6 *Royalty Stacking*.

On a Licensed Product-by-Licensed Product and country-by-country basis, in the event that Licensee is legally required to pay royalties to a third party for licenses to intellectual property rights entered into by Licensee to avoid infringement of such rights by the Exploitation of a Licensed Product in a country, then Licensee may deduct an amount equal to fifty percent (50%) of any such third party royalties from any royalty amounts due to Licensor under Section 5.2.2 for Net Sales of such Licensed Product in such country, provided that notwithstanding anything set forth in this Agreement to the contrary, in no event shall the royalty payments under Section 5.2.2 otherwise due to Licensor for such Licensed Product in such country be less than fifty percent (50%) of the percentage set forth in Section 5.2.2 of Exhibit A (the "*Royalty on Net Sales*").

5.3. *Records and Reports*.

5.3.1. *Reports on Development Activities*.

Licensee shall maintain materially complete, current and accurate records of material development and commercialization activities conducted by Licensee hereunder, and all data and other material information resulting from such activities. Such records shall fully reflect all material work done and results achieved in the performance of the development and commercialization activities in good scientific manner appropriate for regulatory and patent purposes. Licensee shall document all material studies and informal written study records according to Applicable Laws. Licensors shall have the right to review and copy such records maintained by Licensee at reasonable times and to obtain access to the originals to the extent reasonably necessary or useful for regulatory and patent purposes. Licensee shall provide Licensors with written reports detailing Licensee's development and commercialization activities under this Agreement.

5.3.2. *Regulatory Reports*.

Licensee shall keep Licensors informed of regulatory developments relating to any Licensed Products in the Field in the Territory through semi-annual written updates, which updates shall be provided to Licensors and at least every six (6) months during the Term and upon a Licensor's reasonable request therefor. Licensee shall provide Licensors with copies of all regulatory materials generated in support of developing and/or commercializing Licensed Products in the Field in the Territory, and Licensee hereby grants to each Licensor a right of reference (as such term is defined 21 C.F.R. § 314.3(b)) to all such regulatory materials and data for the purpose of developing and/or commercializing products, including Licensed Products, outside the Field, during the Term and thereafter.

5.3.3. Regulatory Responsibilities.

Subject to the terms and conditions of this Agreement, Licensee shall be solely responsible for all regulatory matters for Licensed Products in the Field in the Territory, including preparing and filing any and all regulatory materials for each Licensed Product, at its sole expense.

5.3.4. Notification of Threatened Action.

Each Party shall promptly and, in any event within thirty (30) days, notify the other Party of any information it receives regarding any threatened or pending action, inspection or communication by or from any third party, including without limitation a regulatory authority, which may materially affect the development, commercialization or regulatory status of a Licensed Product in the Field in the Territory. Upon receipt of such information, the Parties shall consult with each other in an effort to arrive at a mutually acceptable procedure for taking appropriate action.

5.3.5. Remedial Actions.

Each Party will notify the other Party immediately, and promptly confirm such notice in writing, if it obtains information indicating that any Licensed Product may be subject to any recall, corrective action or other regulatory action with respect to a Licensed Product taken by virtue of Applicable Laws (a "*Remedial Action*"). The Parties will assist each other in gathering and evaluating such information as is necessary to determine the necessity of conducting a Remedial Action.

5.3.6. Pediatric Priority Review Vouchers.

If Licensee or an Affiliate of Licensee shall own or control a PRV that is granted based on approval of a Licensed Product, Licensee shall notify Licensors within thirty (30) days of the granting of such PRV, and within thirty (30) days of the sale of such PRV, Licensee shall pay the applicable Licensor the percentage set forth in Section 5.3.6 of Exhibit A of any proceeds received by Licensee or its Affiliate as consideration for such PRV. For the purposes of this Section 5.3.6, the applicable Licensor to whom such percentage of proceeds received as consideration for such PRV shall be paid will correspond to the Licensor that Controls the rights to the applicable Licensed Product category giving rise to such PRV. For the avoidance of doubt, unless otherwise agreed upon by the Parties in writing, proceeds from the sale of a PRV received by Licensee or its Affiliates as consideration for a sublicense granted with respect to an MSC Product shall be shared with Novellus in accordance with this Section 5.3.6, and proceeds from the sale of a PRV received by Licensee or its Affiliates as consideration for a sublicense granted with respect to an HSC Product, Sickle-Cell Product, TIL Product, T-Cell Product, Inherited Retinal Disorder Product, Non-syndromic Hearing Loss Product, or Familial Amyloid Disorders Product shall be shared with Factor in accordance with this Section 5.3.6.

5.3.7. *Royalty Reports and Payments*.

Within thirty (30) days following the end of each calendar quarter, commencing with the calendar quarter in which the First Commercial Sale of any Licensed Product is made anywhere in the Territory, Licensee shall provide each Licensor with a report containing the following information for the applicable calendar quarter, on a Licensed Product basis: (i) the amount of Net Sales in the Territory; (ii) an itemized calculation of Net Sales in the Territory showing deductions provided for in the definition of "Net Sales"; (iii) a calculation of the royalty payment due on such Net Sales; and (iv) the exchange rate for such country. Concurrent with the delivery of the applicable quarterly report, Licensee shall pay in U.S. dollars all amounts due to Licensor pursuant to this Agreement with respect to Net Sales by Licensee and its Affiliates and sublicensees for such calendar quarter. All payments due to Licensors hereunder shall be made in U.S. dollars by wire transfer of immediately available funds into an account designated by Licensor.

5.4. *Audit and Inspection Rights*.

Licensee and its Affiliates and sublicensees will maintain complete and accurate records in sufficient detail to permit Licensor to confirm the accuracy of the calculation of payments under this Agreement, including royalty payments and the achievement of Milestones. Upon reasonable prior notice, such records shall be available during regular business hours (without undue disruption of Licensee's business) for a period of three (3) years from the end of the calendar year to which they pertain for examination by an independent accountant selected by the Licensors and reasonably acceptable to Licensee, for the sole purpose of verifying the accuracy of the reports and payments furnished by Licensee pursuant to this Agreement. Audits may not be requested more than once per year, and no period may be audited more than once. Any such auditor shall enter into a confidentiality agreement with Licensee, and shall not disclose Licensee's Confidential Information, except to the extent such disclosure is necessary to verify the accuracy of the reports furnished by Licensee or the amount of payments due by Licensee to Licensors under this Agreement. The auditor may not be compensated on a commission, bonus, or any other payment that depends on the result of the audit or amounts due or paid as a result of the audit. Any undisputed amounts shown to be owed but unpaid shall be paid within thirty (30) days from the accountant's report, plus interest (as set forth in Section 5.6) from the original due date. Licensors shall bear the full cost of such audit.

5.5. *Taxes*.

Each Party shall be solely responsible for the payment of all taxes imposed on its share of income arising directly or indirectly from the efforts of the Parties under this Agreement. The Parties agree to cooperate with one another and use reasonable efforts to reduce or eliminate tax withholding or similar obligations in respect of payments made by a Party to the other Party under this Agreement. To the extent Licensee is required to deduct and withhold taxes on any payment to a Licensor hereunder, Licensee shall pay the amounts of such taxes to the proper governmental authority in a timely manner and promptly transmit to the applicable Licensor(s) an official tax certificate or other evidence of such withholding sufficient to enable the applicable Licensor(s) to claim such payment of taxes. Licensors shall provide the Licensee with any tax forms that may be reasonably necessary in order for the Licensee to not withhold tax or to withhold tax at a reduced rate under an applicable bilateral income tax treaty. Each Party shall provide the other with reasonable assistance to enable the recovery, as permitted by Applicable Laws, of withholding taxes, value added taxes, or similar obligations resulting from payments made under this Agreement, such recovery to be for the benefit of the Party bearing such withholding tax or value added tax.

5.6. *Late Payment*.

If a Licensor does not receive payment of any sum due to it on or before the due date (each, a "*Late Payment*"), Licensee shall pay to the applicable Licensor an amount equal to five percent (5%) of such Late Payment ("*Late Payment Penalty*"), and such Late Payment shall not be considered paid in full until the applicable Licensor has received from Licensee both the full amount of such Late Payment and the Late Payment Penalty. For the avoidance of doubt, payment by Licensee within thirty (30) days past the due date will not be considered a Late Payment subject to a Late Payment Penalty.

Section 6
Warranties

6.1 *Representations, Warranties and Covenants of Licensor*.

6.1.1 The patents identified on Exhibit 1.5 are all the patents owned by Licensors that are necessary and or useful for Licensee to make, use, offer to sell, sell and import the Licensed Products in the Field in the Territory. Licensors hereby represent and warrant to Licensee that, as of the Effective Date and continuing for the entire Term of this Agreement, they are the sole and exclusive owner or licensee of the Licensed Patents and the Auxiliary Technology Patents, and they have the right, power and authority to grant the rights set forth in Section 2.1 of this Agreement.

6.1.2 Licensors hereby represent and warrant to Licensee that, as of the Effective Date and for the entire Term of this Agreement, the execution and performance of Licensors' obligations under this Agreement do not conflict with, cause a default under, result in a breach of or violate any existing contractual obligation that may be owed by a Licensor to any third party, including, without limitation, any Affiliate of a Licensor, nor will Licensors, during the Term of the Agreement, take any action, inaction or enter into agreement that would conflict with, cause a default under, result in a breach of or violate any existing contractual obligation that is owed to Licensee under this Agreement.

6.1.3 Licensors hereby represent and warrant to Licensee that they have full power and authority to execute, deliver and perform this Agreement and that this Agreement constitutes the legally binding and valid obligation of Licensors, enforceable in accordance with its terms, except as such enforcement may be limited by applicable bankruptcy, moratorium and other laws affecting creditors' rights generally.

6.1.4 Licensors hereby represent and warrant to Licensee that (i) there are no liens or other encumbrances on the Licensed Technology, Auxiliary Technologies and Auxiliary Technology Patents or any part thereof which would interfere with the rights granted to Licensee under this Agreement and (ii) Licensors will not take any actions after the Effective Date of this Agreement that would be inconsistent with the rights granted Licensee under this Agreement.

6.1.5 Licensors hereby represent and warrant to Licensee that there is no action or suit pending against Licensors that questions the validity of this Agreement or the right of Licensors to enter into this Agreement or consummate the transactions contemplated hereby, and neither Licensors nor any of their Affiliates is a party to any litigation, arbitration, mediation or other similar legal proceeding.

6.1.6 Licensors hereby represent and warrant to Licensee that there is no action or suit pending against Licensors that would adversely and materially impact Licensors' business or operations.

6.1.7 Licensors hereby represent and warrant to Licensee that there is no action or suit pending against Licensors affecting the validity of the Licensed Patents and Auxiliary Technology Patents, or the ownership of Licensors' Licensed Technology, Auxiliary Technologies, and Auxiliary Technology Patents.

6.2 *Representations, Warranties and Covenants of Licensee*.

6.2.1 Licensee hereby represents and warrants to Licensors that, as of the Effective Date, the execution and performance of Licensee's obligations under this Agreement do not conflict with, cause a default under, or violate any existing contractual obligation that may be owed by Licensee to any third party, including, without limitation, any Affiliate of Licensee.

6.2.2 Licensee hereby represents and warrants to Licensors that there is no action or suit pending against Licensee or any of its Affiliates that questions the validity of this Agreement or the right of Licensee to enter into this Agreement or consummate the transactions contemplated hereby, and neither Licensee nor any of its Affiliates is a party to any litigation, arbitration, mediation or other similar legal proceeding.

6.2.3 Licensee hereby represents, warrants and covenants to Licensors that Licensed Products will be manufactured and sold in compliance with all Applicable Laws, including, without limitation, in accordance with all applicable rules and regulations of the FDA or other Regulatory Authority.

6.3 *Disclaimer*.

Except as expressly provided in Section 6.1, nothing in this Agreement will be construed as:

6.3.1 a warranty or representation by Licensors as to the validity or scope of any of the Licensed Technology, Auxiliary Technologies or the Auxiliary Technology Patents;

6.3.2 a warranty or representation by Licensors that anything made, used, sold or otherwise disposed of under the licenses granted in this Agreement, or the practice of the Licensed Technology, Auxiliary Technologies or the Auxiliary Technology Patents, will or will not infringe patents of third parties; or

6.3.3 an obligation of Licensors to bring or prosecute actions or suits against third parties for infringement of Licensed Patents or Auxiliary Technology Patents or misappropriation of Licensed Know-How.

6.4 *Express Disclaimer*.

EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, LICENSORS ARE PROVIDING THE LICENSED TECHNOLOGY, THE AUXILIARY TECHNOLOGIES, AND THE AUXILIARY TECHNOLOGY PATENTS "AS IS." EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER LICENSORS NOR LICENSEE MAKE ANY REPRESENTATIONS, EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OR AS TO THE VALIDITY OF ANY PATENTS, AND NEITHER LICENSOR ASSUMES ANY RESPONSIBILITIES WHATSOEVER WITH RESPECT TO USE, SALE, OR OTHER DISPOSITION OF PRODUCTS INCORPORATING OR MADE BY USE OF LICENSED PATENTS OR AUXILIARY TECHNOLOGY PATENTS UNDER THIS AGREEMENT. EXCEPT FOR VIOLATIONS OF SECTION 8.6 AND EXCEPT AS OTHERWISE PROVIDED IN SECTION 9.1 AND SECTION 9.2 WITH RESPECT TO THIRD PARTY INDEMNIFICATION CLAIMS, IN NO EVENT WILL EITHER PARTY, OR ITS TRUSTEES, DIRECTORS, OFFICERS, EMPLOYEES, AFFILIATES OR AGENTS, BE LIABLE TO THE OTHER PARTY FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES OF ANY KIND, WHETHER GROUNDED IN TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, CONTRACT OR OTHERWISE.

6.5 *Exclusion of Consequential and Other Direct Damages*.

TO THE FULLEST EXTENT PERMITTED BY LAW, NEITHER PARTY WILL BE LIABLE TO THE OTHER PARTIES OR ANY OTHER PERSON FOR ANY INJURY TO OR LOSS OF GOODWILL, REPUTATION, BUSINESS PRODUCTION, REVENUES, PROFITS, ANTICIPATED PROFITS, CONTRACTS, OR OPPORTUNITIES (REGARDLESS OF HOW THESE ARE CLASSIFIED AS DAMAGES), OR FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL, PUNITIVE, OR ENHANCED DAMAGES, WHETHER ARISING OUT OF BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, PRODUCT LIABILITY, OR OTHERWISE (INCLUDING THE ENTRY INTO, PERFORMANCE, OR BREACH OF THIS AGREEMENT), REGARDLESS OF WHETHER SUCH LOSS OR DAMAGE WAS FORESEEABLE AND THE PARTY AGAINST WHOM LIABILITY IS CLAIMED HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED REMEDY OF ITS ESSENTIAL PURPOSE. THE FOREGOING LIMITATIONS WILL NOT: (A) APPLY TO INFRINGMENT BY A PARTY OF THE OTHER PARTY'S INTELLECTUAL PROPERTY RIGHTS OR A PARTY'S BREACH OF SECTIONS 8.6 OR 11.13, OR (B) LIMIT A PARTY'S INDEMNIFICATION OBLIGATIONS UNDER SECTION 9.

Section 7
Term and Termination

7.1. *Term*.

The term of this Agreement will begin on the Effective Date and will not terminate unless terminated under the provisions of this Section 7.

7.2. *Termination by Licensor*.

A Licensor may, at its option, terminate this Agreement, upon written notice to Licensee of any of the following events or otherwise as provided in this Agreement:

7.2.1 subject to the provisions set forth in Section 10, any material breach of any of Licensee's obligations under this Agreement, which Licensee fails to remedy within ninety (90) days after receipt of written notice by a Licensor of such material breach and a Licensor's demand that it be cured, for avoidance of doubt, once the provisions of Section 10 are triggered, the ninety (90) day cure period is tolled pending the Alternative Dispute Resolution procedures and timing set forth in Section 10;

7.2.2 subject to the provisions set forth in Section 10, the filing 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 or if Licensee is served with an involuntary petition against it, filed in any insolvency proceeding, and such petition is not dismissed within sixty (60) days after the filing thereof, or if Licensee will propose or be a party to any dissolution or liquidation, or if Licensee will make an assignment for the benefit of its creditors, or if at any time Licensee voluntarily enters into proceedings for winding up or dissolution of business; *provided, however*, if Licensee provides for the cure of all of its defaults under this Agreement (if any) and provides adequate assurance of its future performance of its obligations, then the Licensors shall not have the right to terminate this Agreement pursuant to this Section 7.2.2;

7.2.3 subject to the provisions set forth in Sections 4.4 and 7.3, Licensee's material failure to timely achieve the Milestones;

7.2.4 subject to the provisions set forth in Section 5, Licensee's failure to timely make any payment required to be made to Licensors as set forth in Section 5 or Exhibit A or Section 8.1, which Licensee fails to remedy within thirty (30) days after receipt of written notice by Licensors of such failure and a Licensor's demand that it be cured;

7.2.5 Licensee's use, practice or Exploitation of the Licensed Technology, Auxiliary Technologies or the Auxiliary Technology Patents outside of the Field or for the development or Exploitation of products other than Licensed Products, which Licensee fails to remedy within sixty (60) days after receipt of written notice by a Licensor and a Licensor's demand that it be cured;

7.2.6 any breach of Licensee's obligations under Section 7.5 or Section 11.13, which Licensee fails to remedy within sixty (60) days after receipt of written notice by a Licensor and a Licensor's demand that it be cured; or

7.2.7 Licensee's failure to comply with the obligation to maintain in full force and effect the required insurance coverage in accordance with Section 9.3, which Licensee fails to remedy within ninety (90) days after receipt of written notice by a Licensor of such material breach and a Licensor's demand that it be cured.

7.2.8 Subject to the provisions set forth in Section 10, nothing in the foregoing subsections of this Section 7.2 shall prohibit a Licensor from pursuing any other remedies at law which it may have in connection with Licensee's uncured material breach. For the avoidance of doubt, a Licensor's right to terminate under Sections 7.2.3, 7.2.4, 7.2.5, or 7.2.6 shall not be subject to the provisions set forth in Section 10, shall not expire, and any such termination shall take effect upon written notice to Licensee.

7.3. *Partial Termination by Licensor*.

In the event the events or conditions set forth in Section 7.2 pertain only to a particular category of Licensed Product (e.g., a HSC Product, MSC Product, Sickle-Cell Product, TIL Product, T-Cell Product, Inherited Retinal Disorder Product, Non-syndromic Hearing Loss Product or Familial Amyloid Disorders Product), the applicable Licensor(s) shall have the right to elect to terminate this Agreement in-part with respect to that category of Licensed Product, and upon such termination in-part the Agreement will otherwise remain in effect.

7.4. *Termination by Licensee*.

Licensee may, at its option, terminate this Agreement in its entirety, upon written notice to the Licensors of any of the following events or otherwise as provided in this Agreement:

7.4.1 at any time after the payment of Payment One without cause, by giving at least one hundred and twenty (120) days prior written notice of such termination to Licensors; or

7.4.2 subject to the provisions set forth in Section 10, upon any material breach of a Licensor's express representations, warranties or covenants set forth in Section 6.1, which such Licensor fails to remedy within sixty (60) days after receipt of written notice by Licensee of such material breach and Licensee's demand that it be cured;

7.4.3 subject to the provisions set forth in Section 10, any material breach of any of a Licensor's obligations under this Agreement, which Licensor fails to remedy within ninety (90) days after receipt of written notice by Licensee of such material breach and a Licensee's demand that it be cured;

7.4.4 subject to the provisions set forth in Section 10, Licensor's failure to comply with Section 4.5.1 (Licensor's Responsibilities and Technology Transfer), which Licensees fail to remedy within ninety (90) days after receipt of written notice by Licensee of such material breach and Licensee's demand that it be cured; or

7.4.5 subject to the provisions set forth in Section 10, the filing 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 or if a Licensor is served with an involuntary petition against it, filed in any insolvency proceeding, and such petition is not dismissed within sixty (60) days after the filing thereof, or if a Licensor will propose or be a party to any dissolution or liquidation, or if a Licensor will make an assignment for the benefit of its creditors, or if at any time a Licensor voluntarily enters into proceedings for winding up or dissolution of business; ***provided, however***, if a Licensor provides for the cure of all of its defaults under this Agreement (if any) and provides adequate assurance of its future performance of its obligations, then the Licensee shall not have the right to terminate this Agreement pursuant to this Section 7.4.5.

7.4.6 Nothing in the foregoing subsections of this Section 7.4 shall prohibit Licensee from pursuing any and all rights and remedies it may have under this Agreement or at law or in equity.

7.5. *Remedies to Licensee*.

In the event there is a material breach of Licensor's express representations, warranties, or covenants set forth in Section 6.1, which such Licensor fails to remedy within sixty (60) days after receipt of written notice by Licensee of such material breach and Licensee's demand that it be cured, Licensee may, at its option, elect to terminate this Agreement in-part or in whole based on the section of the Agreement affected.

7.6. *Challenging Validity*.

Except to the extent unenforceable under Applicable Law in the Territory, Licensors may terminate this Agreement by written notice to Licensee in the event of a breach of Section 11.13 by Licensee, its Affiliates or sublicensees or in the event that Licensee or any of its Affiliates challenges, in any formal proceeding, the validity, patentability, enforceability, scope, construction or inventorship of any of the Licensed Patents or Auxiliary Technology Patents or assists any third party in any such challenge (each, a "***Patent Challenge***"). If a sublicensee of Licensee brings any such Patent Challenge or assists a third party in bringing any such Patent Challenge (except as required under a court order or subpoena), then a Licensor may send a written demand to Licensee to terminate such sublicense. If Licensee fails to so terminate such sublicense within thirty (30) days after Licensor's demand, Licensors may terminate this Agreement. In any country(ies) where Licensors may not terminate this Agreement in the event of a Patent Challenge, if: (i) Licensee brings a Patent Challenge against Licensors; or (ii) Licensee assists a third party in bringing a Patent Challenge against Licensors (except as required under a court order or subpoena), and such Patent Challenge is not successful (*i.e.,* the Licensed Patent(s) subject to such Patent Challenge retain Valid Claims), then all payments due under Exhibit A with respect to Licensed Products covered by such Patent Rights as were subject to the Patent Challenge shall be doubled for the remainder of the term of this Agreement. In the event that such a Patent Challenge is successful, Licensee will have no right to recoup any payments made during the period of such Patent Challenge.

7.7. *Effects of Termination; Termination of License*.

Upon a termination of this Agreement for any reason, Licensee's rights to the Licensed Technology, Auxiliary Technologies, and the Auxiliary Technology Patents, inclusive of the Licensed Products, which have been granted hereunder and all use thereof will terminate, any and all rights in the Licensed Technology, Auxiliary Technologies, and the Auxiliary Technology Patents, inclusive of the Licensed Products, will revert back to Licensors and Licensee will cease using the Cell Line, and will cease selling, offering for sale, importing, exporting, developing and commercializing all Licensed Products. Upon Licensor's request, in the event of a termination of this Agreement in its entirety, Licensee will destroy or return the Cell Line and all copies, except for the copies to be retained by Licensee's legal counsel, of any media or materials which have been provided by Licensors to Licensee and are the property of Licensors, including but not limited to all data, documentation, notes, plans, drawings, copies, samples and computer code. Upon termination of this Agreement other than termination by Licensor(s) in accordance with Section 7.2, Licensee, Licensee's Affiliates and Licensee's sublicensees may complete and sell any work-in-progress and inventory of Licensed Products that exist as of the effective date of termination provided that (i) Licensee pays Licensors the applicable Royalty on Net Sales in accordance with the terms and conditions of this Agreement, and (ii) Licensee, Licensee's Affiliates and Licensee's sublicensees shall complete and sell all work-in-progress and inventory of Licensed Products within six (6) months after the effective date of termination.

7.8. *Effect on Sublicenses*.

In the event that this Agreement is terminated by Licensor in accordance with Section 7.2, and if Licensee requests that a given sublicense(s) survive such termination, any such surviving sublicense(s) shall be considered a direct license from Licensor to such surviving sublicensee; provided that such sublicensee agrees in writing that (i) Licensors are entitled to enforce all relevant provisions directly against such sublicensee, and (ii) Licensors shall not assume, and shall not be responsible to such sublicensee for, any representations, warranties or obligations of Licensee to such sublicensee, other than to permit such sublicensee to exercise any rights to the Licensed Technology, Auxiliary Technologies, and the Auxiliary Technology Patents sublicensed to such sublicensee by Licensee.

7.9. *Right to Reference Regulatory Filings*.

Upon termination of this Agreement pursuant to Sections 7.2, 7.3 or 7.4.1, Licensee will permit Licensors and their Affiliates, licensors, licensees and sublicensees to reference Regulatory Approvals obtained from, and filings made by Licensee with Regulatory Authorities with respect to the Licensed Products in the Field at no cost to Licensors. In addition, at a Licensor's reasonable request, Licensee will allow Licensors to review at Licensee's offices all records required by Regulatory Authorities to be maintained with respect to the development, sale, storage, handling, shipping and use of the Licensed Products in the Field, and all reimbursement approval files pertaining to the Licensed Products in the Field.

7.10. *Accrued Obligations*.

Expiration or termination of this Agreement will not release either Party from any obligation that matured prior to the effective date of such expiration or termination. Upon expiration or termination of this Agreement for any reason, any unpaid amounts payable to Licensor shall become immediately due, and payment thereof shall remain an ongoing obligation of Licensee until such amount is paid in full.

7.11. *Survival*.

Upon expiration or termination of this Agreement, Sections 1, 2.3, 2.4, 5.4, 6.4, 6.5, 7.6-7.10, 8.6, and 9-11 will, with related definitions, survive and remain in full force and effect.

Section 8
Protection of Intellectual Property Rights

8.1. *Patent Prosecution*.

During the Term, Licensors will be responsible for preparing, filing, prosecuting and maintaining all patent applications and patents included in the Licensed Patents and the Auxiliary Technology Patents in the Territory. For the sake of clarity, as used herein the term "prosecution" shall include interference, opposition, and derivation proceedings in connection with the Licensed Patents and the Auxiliary Technology Patents. Licensors shall select patent counsel to conduct such activities regarding the Licensed Patents and the Auxiliary Technology Patents and shall keep Licensee informed of prosecution activities for Licensed Patents and the Auxiliary Technology Patents providing Licensee an opportunity to provide comments. Licensors shall cause all patent applications and patents included in the Licensed Patents and the Auxiliary Technology Patents in the Territory to be diligently prosecuted, and in the event Licensors decide to irrevocably discontinue prosecution of any patent applications included in the Licensed Patents or the Auxiliary Technology Patents, or irrevocably allow any patents included in the Licensed Patents or the Auxiliary Technology Patents to lapse, Licensor shall provide Licensee notice thereof in accordance with Section 8.2. All Patent Expenses will be borne by Licensee *pro rata*, whereby Licensee's *pro rata* share of such Patent Expenses shall equal 1/n of such Patent Expenses, where "n" equals the total number of licenses of the Licensed Patents or Auxiliary Technology Patents at the time such Patent Expenses were incurred, as determined by Factor in its sole discretion. Licensee has no obligation to pay any Patent Expenses that were incurred prior to the Effective Date.

8.2. *Licensee's Right to Take Over Prosecution or Pay Fees*.

Subject at all times to the rights granted by Licensors to their third-party licensees prior to the Effective Date, in the event that Licensors decides to irrevocably discontinue prosecution of any patent applications included in the Licensed Patents or the Auxiliary Technology Patents without filing a continuing or divisional application, Licensors will notify Licensee thereof within such time as may be reasonably necessary for Licensee to continue such prosecution on the applicable Licensor's behalf, and Licensee will have the right, but not the obligation, to so continue such prosecution at its own cost and expense. In the event that Licensors decide to allow any patents included in the Licensed Patents or the Auxiliary Technology Patents to lapse as a result of nonpayment of an annuity, maintenance fee, or equivalent, Licensors will notify Licensee thereof within such time as may be reasonably necessary for Licensee to make such payment on the applicable Licensor's behalf, and Licensee will have the right, but not the obligation, to pay the annuity, maintenance fee, or equivalent at its own cost and expense.

8.3. *Enforcement of Licensed Patents*.

8.3.1. *Notice*.

If either Party becomes aware of any infringement in the Field, anywhere in the Territory, of any issued patent within the Licensed Patents or the Auxiliary Technology Patents, such Party will notify the other Party in writing within thirty (30) days to that effect.

8.3.2. *Infringement of Licensed Patents or Auxiliary Technology Patents by Third Parties*.

8.3.2.1 Subject at all times to the rights granted by Licensors to their third-party licensees prior to the Effective Date, in the case of any infringement of any Licensed Patent or Auxiliary Technology Patent in the Field by any third party, the Licensee will have the first right, but not the obligation, to cause such third party to cease infringement and to otherwise enforce such Licensed Patent or Auxiliary Technology Patent, or to defend the Licensed Patent or Auxiliary Technology Patent in any declaratory judgment action brought by third party(ies) which alleges the invalidity, unenforceability or non-infringement of the rights associated with the Licensed Patent or Auxiliary Technology Patent. All costs and expenses associated with defending the Licensed Patent or Auxiliary Technology Patent in any such declaratory judgment action will be borne by Licensee. Licensor will cooperate and provide reasonable assistance in any action described in this Section 8.3.2.1. Except for providing such cooperation and reasonable assistance, Licensor will have no obligation regarding the legal actions described herein; *provided that* if required to enable Licensee to initiate or continue such action, Licensor will join such action at Licensee's request and expense, or allow where required by law for Licensee to proceed in Licensee's name. Any recovery or compensation resulting from such proceeding will first be used to reimburse Licensor for any unreimbursed expenses incurred in connection with providing assistance or joining the proceeding at Licensee's request, and the remainder, if any, will belong entirely to the Licensee.

8.3.2.2 If Licensee does not, within a reasonable period after becoming aware of a third party infringement of the Licensed Patents or Auxiliary Technology Patents in the Field, but in any event no less than ninety (90) calendar days from becoming aware of the third party infringement, (i) initiate legal proceedings against such threatened or actual infringement, or defend legal proceedings brought by a third party, as provided in Section 8.3.2.1 above, or (ii) take other reasonable steps to cause such infringement to terminate (for example, by initiating licensing discussions), Licensor may deliver written notice to Licensee that it intends to take action to cause such infringement to terminate, and subject to Licensee's prior written consent, Licensor may take such action as it deems reasonably necessary to enforce its rights in the Licensed Patents or Auxiliary Technology Patents in the Field, including, without limitation, to bring, at its own expense, an infringement action or file any other appropriate action or claim related to such infringement against any third party. Licensee will, at the reasonable request of Licensor, cooperate and provide reasonable assistance in any action taken by Licensor and described in this Section 8.3.2.2 and, if required to enable Licensor to initiate or continue such action, will join such action at Licensors' reasonable request, all at Licensors' cost and expense. Any recovery or compensation resulting from such proceeding undertaken by Licensor will first be used to reimburse Licensee for any unreimbursed expenses in connection with providing assistance at or joining the proceeding at Licensors' request, then to reimburse Licensee for any expenses, and thereafter to reimburse Licensors for any other unreimbursed expenses incurred in connection with the proceeding (including attorneys' fees, expert witness fees, court fees, and related charges), and the remainder, if any, will be shared equally by Licensors and Licensee.

8.3.2.3 In the case of any infringement of any Licensed Patent or Auxiliary Technology Patent outside of the Field by any third party, Licensors shall have the right, but not the obligation, to cause such third party to cease infringement and to otherwise enforce such Licensed Patent or Auxiliary Technology Patent, or to defend the Licensed Patent or Auxiliary Technology Patent in any declaratory judgment action brought by third party(ies) which alleges the invalidity, unenforceability or non-infringement of the rights associated with the Licensed Patent or Auxiliary Technology Patent. All costs and expenses associated with defending the Licensed Patent or Auxiliary Technology Patent in any such declaratory judgment action will be borne by Licensor. Licensee will cooperate and provide reasonable assistance in any action described in this Section 8.3.2.3. Except for providing such cooperation and reasonable assistance, Licensee will have no obligation regarding the legal actions described herein; *provided that* if required to enable Licensor to initiate or continue such action, Licensee will join such action at Licensor's request and expense. Any recovery or compensation resulting from such proceeding will first be used to reimburse Licensee for any unreimbursed expenses incurred in connection with providing assistance or joining the proceeding at Licensor's request, and the remainder, if any, will belong entirely to the Licensors.

8.4. *Infringement of Third-Party Rights*.

8.4.1. Each Party will promptly notify the other Party in writing of any notice or claim of any allegation of infringement or commencement against it of any suit or action for infringement of a third-party patent based upon or arising from actions taken under the licenses granted in this Agreement ("*Third-Party Infringement Claim*"). If such Third-Party Infringement Claim is alleged or commenced against Licensee, Licensee will have the sole right to defend and settle such Third-Party Infringement Claim, and Licensee will not be obligated to enter into negotiations with such third party to obtain rights for either Licensee or Licensors under the third-party patent. Subject to Section 9.1, if such Third-Party Infringement Claim is alleged or commenced against Licensor(s), Licensee will have the first right, but not the obligation, to defend and settle such Third-Party Infringement Claim, *provided, however*, that Licensee will not be obligated to enter into negotiations with such third party to obtain rights for Licensors under the third-party patent. With respect to any such defense by Licensee of a Third-Party Infringement Claim alleged or commenced against a Licensor, Licensee will not make any settlements of such Third-Party Infringement Claim that would materially adversely affect a Licensor's rights or interests in the Licensed Technology, Auxiliary Technologies or the Auxiliary Technology Patents without first obtaining the Licensors' prior written consent, not to be unreasonably withheld or delayed. If Licensee opts not to defend or settle such Third-Party Infringement Claim alleged or commenced against a Licensor, then subject to Section 9.1, Licensee will notify Licensors of such decision and, at Licensors' expense, Licensors will have the right to undertake the defense or settlement of such Third-Party Infringement Claim. In any defense of a Third-Party Infringement Claim under this Section 8.4, the non-defending Party will reasonably cooperate with the defending Party in the defense of such Third-Party Infringement Claim, including by cooperating with the defending Party in the assessment of such Third-Party Infringement Claim and, if requested by the defending Party, by assisting such defending Party in the development and evaluation of any available defense(s) in response to such Third-Party Infringement Claim based on the invalidity and/or non-infringement of the subject third-party patent(s). Notwithstanding any provision of Section 9.1 to the contrary, the non-defending Party shall bear the cost of its cooperation in any such defense of a Third-Party Infringement Claim. Additionally, if in Licensee's reasonable opinion, a Licensed Product is likely to become the subject of a Third-Party Infringement Claim, upon Licensee's reasonable request therefor, Licensors shall, at Licensors' expense, assist Licensee in the assessment of the subject third-party patent(s) and the development of any bases of invalidity and/or non-infringement of such third-party patent(s).

8.5. *Patent Marking*.

Licensee will mark Licensed Products Covered by Licensed Patents or Auxiliary Technology Patents and which are sold or distributed by Licensee (and will require that Licensee's Affiliates and sublicensees mark Licensed Products sold or distributed by Licensee's sublicensees) in a given country in the Territory with a notice that will recite that such Licensed Products are made under one or more of the Licensed Patents or Auxiliary Technology Patents, in the manner and with such prominence as is legally required or, if there is no legal requirement, as is customary for such proprietary notices in such country.

8.6. *Confidential Information*.

Each Party shall maintain the Confidential Information of the other Party in strict confidence, and will not disclose, divulge or otherwise communicate such Confidential Information to others, or use it for any purpose, except pursuant to, and in order to carry out, the terms and objectives of this Agreement, or with the express written consent of the Party who provided such Confidential Information. Each Party will maintain the confidentiality of the other Party's confidential information using methods and practices that are substantially similar to those that the receiving Party uses to maintain the confidentiality of its own confidential information, but in no event less than a reasonable degree of care. Except as may be authorized in advance in writing by the disclosing Party, the receiving Party will only grant access to the Confidential Information to its employees and agents as necessary to carry out activities under this Agreement and such employees and agents will have entered into non-disclosure agreements consistent with the terms of this Section 8.6. The obligations of confidentiality described above will not pertain to that part of any Confidential Information to the extent that it is supported by competent written proof that:

8.6.1 such information was lawfully in the receiving Party's possession or control prior to the time it received the information from the disclosing Party;

8.6.2 such information was developed by the receiving Party independently of and without reference to the Confidential Information of the disclosing Party;

8.6.3 such information was, at the time it was disclosed to or obtained by the receiving Party, or thereafter became, available to the public through no act or omission of the Party holding such information; or

8.6.4 such information was lawfully obtained by the receiving Party from a third party that has the right to disclose such information free of any obligations of confidentiality.

8.6.5 In addition, a receiving Party may disclose such Confidential Information to the limited extent required to do so by Applicable Law or a proper legal, governmental or other competent authority, or by the rules of any securities exchange on which any security issued by either Party is traded, or included in any filing or action taken by the receiving Party to obtain or maintain government clearance or approval to market a subject Licensed Product. Except where impracticable, such required Party shall give the other Party reasonable advance notice of such disclosure requirement and shall afford the other Party a reasonable opportunity to oppose, limit or secure confidential treatment for such required disclosure, or, where it is impracticable to give an advance notice, such required Party shall give the other Party reasonable notice promptly after such required disclosure. In the event of any such required disclosure, the required Party shall disclose only that portion of the Confidential Information legally required to be disclosed.

8.6.6 In addition, either Party may disclose Confidential Information, including this Agreement, and the terms hereof (including providing a copy hereof, redacted as appropriate) to any bona fide potential licensor, licensee, partner or permitted sublicensee or successor to said Party's interest under this Agreement, to a bona fide potential lender from which said Party is considering borrowing money, to a bona fide potential collaborator in connection with development or commercialization of Licensed Products, to any bona fide financial investor from which said Party may take money, to any insurance broker, business, financial or scientific consultants, attorneys, and accountants; *provided, however*, in any such case said Party shall first obtain a written obligation of confidentiality no less stringent than that imposed in this Section 8.6 (or in the case of attorneys or other professionals, an equivalent professional duty of confidentiality) from the bona fide potential licensor, licensee, partner, permitted sublicensee or successor, bona fide potential lender, bona fide potential collaborator, bona fide financial investor, insurance broker, business, financial or scientific consultant, attorney or accountant.

8.7 *Use of Names*.

Neither Party may identify the other Party in any promotional advertising or other promotional materials to be disseminated to the public or any portion thereof, or use the name of any staff member or employee of the other Party or any trademark, service mark, trade name, symbol or logo that is associated with the other Party, without the other Party's prior written consent. Notwithstanding the foregoing, and for the avoidance of doubt, without the consent of the other Party either Party may comply with disclosure requirements of all Applicable Laws relating to its business, including, without limitation, United States and state securities laws. Each Party may include the other Party's name, logo, and a brief description of such other Party on said Party's website.

8.8. *Press Releases*.

The Parties shall mutually agree upon the timing and content of any press releases or other public announcement relating to this Agreement and the transactions contemplated herein; provided, however, that subject to Section 2.4.2, the foregoing shall not apply to publication of scientific findings in the form of Licensed Products or in connection with the Exploitation of Licensed Products.

Section 9
Indemnification; Insurance

9.1. *Indemnification by Licensee*.

Licensee will indemnify, defend and hold harmless each Licensor, its Affiliates and their respective directors, officers, employees, consultants, licensors and agents, and their respective successors, heirs, and assigns (each a "*Licensor Indemnitee*"), against all third party suits, actions, claims, proceedings, liabilities, demands, damages, losses, or expenses (including legal expenses, investigative expenses, and reasonable attorneys' fees), including claims resulting from or connected to the death of or injury to any person or persons, or any damage to property, resulting from, arising out of, or otherwise attributable to Licensee's or, as applicable Licensee's Affiliate's or sublicensee's: (a) negligence or misconduct, (b) failure to comply with Applicable Laws or the terms of this Agreement, including any breach of Licensee's express representations and warranties set forth in this Agreement, (c) Exploitation of Licensed Products or the exercise of the licenses granted under this Agreement, including the production, manufacture, sale, use, lease, consumption, administration, shipping, storage, transfer, advertisement, analysis, measurement, description, or characterization of the Licensed Technology, Auxiliary Technologies, Auxiliary Technology Patents, Improvements, Improvement Patents, Cell Line or Licensed Products, or any activity arising from or in connection with any right or obligation of Licensee hereunder, except in each case to the extent resulting from, arising out of, or otherwise attributable to a Licensor's breach of any express representation, warranty or covenant set forth in Section 6.1 of this Agreement, or any act of gross negligence or intentional misconduct by a Licensor Indemnitee. The Licensors will promptly give notice to Licensee of any suits, actions, claims, proceedings, liabilities, demands, damages, losses, or expenses which might be covered by this Section 9.1 and Licensee will have the right to defend the same, including selection of counsel and control of the proceedings; provided that Licensee will not, without the written consent of the applicable Licensor, settle or consent to the entry of any judgment with respect to any such third party claim (x) that does not release the applicable Licensor Indemnitee(s) from all liability with respect to such third party claim or (y) which may materially adversely affect the applicable Licensor(s) or the Licensor Indemnitees or under which such Licensor(s) or the applicable Licensor Indemnitee(s) would incur any obligation or liability, other than one as to which Licensee has an indemnity obligation hereunder. Each Licensor agrees to fully cooperate and aid such defense. Licensors at all times reserve the right to select and retain counsel of its own at its own expense to defend such Licensor's interests.

9.2. *Indemnification by Licensor*.

9.2.1. Each Licensor (severally and not jointly) will indemnify, defend and hold harmless Licensee, its Affiliates and their respective directors, officers, employees, consultants, licensors and agents, and their respective successors, and assigns (each a "*Licensee Indemnitee*"), against all third party suits, actions, claims, proceedings, liabilities, demands, damages, losses, or expenses (including legal expenses, investigative expenses, and reasonable attorneys' fees) resulting from, arising out of, or otherwise attributable to such Licensor's breach of its express representations and warranties set forth in Section 6.1 of this Agreement, except to the extent resulting from, arising out of, or otherwise attributable to Licensee's breach of any express representation, warranty or covenant set forth in Section 6.2, or any act of gross negligence or intentional misconduct by a Licensee Indemnitee.

9.2.2. Licensee will promptly give notice to Licensors of any suits, actions, claims, proceedings, liabilities, demands, damages, losses, or expenses which might be covered by this Section 9.2 and Licensors will have the right to defend the same, including selection of counsel and control of the proceedings; provided that Licensors will not, without the written consent of Licensee, settle or consent to the entry of any judgment with respect to any such third party claim (x) that does not release the Licensee Indemnitee(s) from all liability with respect to such third party claim or (y) which may materially adversely affect Licensee or the Licensee Indemnitee or under which Licensee or the Licensee Indemnitee would incur any obligation or liability, other than one as to which a Licensor has an indemnity obligation hereunder. Licensee agrees to fully cooperate and aid such defense. Licensee at all times reserves the right to select and retain counsel of its own at its own expense to defend Licensee's interests.

9.3 *Insurance*.

Licensee shall maintain in full force and effect during the Term and for a period of three (3) years after expiration or termination of this Agreement, worker's compensation, general liability and professional liability, clinical trial liability, and product liability insurance coverage, all in such amounts and with such scope of coverages as are reasonably sufficient to cover Licensee's obligations under this Agreement (including Licensee's indemnity obligations set forth in Section 9.1) and as are customary in the life sciences and pharmaceutical industries. Upon written request, Licensee shall provide evidence of such insurance to Licensors. Licensors shall be named as an additional insured with respect to such insurance policies, and Licensee shall ensure that Licensors will receive no less than fourteen (14) days' prior notice of any cancelation, non-renewal or material change in such insurance coverage.

Section 10
Alternative Dispute Resolution

10.1. *Negotiation*.

In the event of any dispute or disagreement between the Licensor(s) and Licensee as to the interpretation of any provision of this Agreement or any other related document (or the performance of any obligations hereunder or thereunder), the matter, upon written request of either a Licensor or Licensee, shall be referred to representatives of the applicable Licensor(s) and Licensee for decision, each such Party being represented by an Executive Officer (the "*Representatives*"). The Representatives shall promptly meet in a good faith effort to resolve the dispute. If the Representatives do not mutually agree upon a decision within thirty (30) calendar days after reference of the matter to them, each of the Licensor(s) and Licensee shall be free to exercise the remedies available to it under Section 10.2. Each of the Licensor(s) and Licensee may extend the period of time for negotiation among the Representatives for an additional period of thirty (30) calendar days on one (1) occasion per dispute.

10.2. *Submission to Arbitration*.

If the Licensor(s) and Licensee are unable to resolve such dispute pursuant to Section 10.1, the dispute shall be submitted to binding arbitration (without any recourse to the federal or state courts except to enforce any arbitral award or, within forty five (45) days of an Arbitrator's rendering of a final decision, to appeal such final decision based solely on a claim that the Arbitrator engaged in gross misconduct or made a material error or miscalculation in his or her decision) in accordance with the rules of JAMS/End Dispute ("*JAMS*") then in force (except as expressly modified below), and the arbitration hearings shall be held before a single arbitrator ("*Arbitrator*") in Boston, Massachusetts. The Licensor(s) and Licensee agree to appoint an Arbitrator who is knowledgeable in the biotechnology and/or life sciences industries. If the Licensor(s) and Licensee cannot agree upon an Arbitrator within ten (10) days after a demand for arbitration has been filed with the JAMS by either of them, either or both of the participating Licensor(s) and Licensee may request the JAMS to name a panel of five (5) candidates to serve as Arbitrator. The participating Licensor(s) and Licensee shall each, in successive rounds (with the Party demanding the arbitration having the first chance to strike a name), strike one name off this list until only one name remains, and such last-named person shall be the Arbitrator.

10.3. *Conduct of Arbitration*.

The Arbitrator shall be required to (a) follow the substantive rules of Massachusetts State or Federal law, as applicable, (b) require all testimony to be transcribed, and (c) accompany his or her award with findings of fact and a statement of reasons for the decision. The Arbitrator shall have the authority to permit discovery for no more than thirty (30) days, to the extent deemed appropriate by the Arbitrator, upon reasonable request of a participating Party. The Arbitrator shall have no power or authority to (i) add to or detract from the written agreement of the Parties set forth herein, (ii) modify or disregard any provision of this Agreement or any of the other related documents, or (iii) address or resolve any issue not submitted by the Parties. The Arbitrator shall hold proceedings during a period of no longer than thirty (30) calendar days promptly following conclusion of discovery, and the Arbitrator shall render a final decision within thirty (30) days following conclusion of the hearings. The Arbitrator shall have the power to grant injunctive relief (without the necessity of a Party posting a bond) in the event a Party has violated the confidentiality provisions set forth in this Agreement, but shall have no power to award punitive and/or exemplary damages in the event of a breach. In the event of any conflict between the commercial arbitration rules then in effect and the provisions of this Agreement, the provisions of this Agreement shall prevail and be controlling.

10.4. *Interim Relief*.

Either Licensor(s) or Licensee may, without waiving any remedy under this Agreement, apply to the Arbitrator for interim injunctive relief until the arbitration award is rendered or the controversy is otherwise resolved. Either Licensor(s) or Licensee 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 regarding the Intellectual Property of that Party pending the arbitration award. The Arbitrator shall have no authority to award punitive or any other type of damages not measured by a Party's compensatory damages.

10.5. *Cost of Arbitration*.

The Licensor(s) and Licensee shall share in the actual and direct costs of the engagement of the Arbitrator, but the prevailing Party(ies) in the arbitration shall be reimbursed by the non-prevailing Party(ies) for the prevailing Party's(ies') fees and costs of arbitration (e.g., the costs, fees and expenses of outside experts and counsel retained by the prevailing Party). If Licensor(s) or Licensee is not deemed by the Arbitrator to be the primary prevailing Party, then each Party will pay its own costs, fees and expenses (including attorneys' fees) and an equal share of the Arbitrator's fees and any administrative fees of arbitration.

10.6. *Excluded Claims*.

Unless otherwise mutually agreed upon by the Parties in writing, any Excluded Claims shall be brought in the federal court for the District Court of Massachusetts, if federal jurisdiction is available, or, alternatively, in the state courts in Suffolk County, Massachusetts. Each of the Parties hereby submits to the exclusive jurisdiction of such courts for the purpose of any such litigation; *provided, however*, that a final judgment in any such litigation shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each Party irrevocably and unconditionally agrees not to assert (a) any objection which it may ever have to the laying of venue of any such litigation in such courts, (b) any claim that any such litigation brought in any such court has been brought in an inconvenient forum, and (c) any claim that such court does not have jurisdiction with respect to such litigation. As used in this Section 10.6, the term "*Excluded Claim*" means a dispute, controversy or claim that concerns: (x) the scope, construction, validity or infringement of a patent, trademark or copyright; (y) any antitrust, anti-monopoly or competition law or regulation, whether or not statutory; or (z) the Licensee's or, as applicable Licensee's Affiliates or sublicensee(s), Exploitation of Licensed Products or use of the Licensed Technology, Auxiliary Technologies, or the Auxiliary Technology Patents outside of the Field.

10.7. *Injunctive Relief; Specific Performance*.

Notwithstanding anything to the contrary herein, nothing in this Section 10 shall preclude a Party from seeking injunctive relief or specific performance in a court of competent jurisdiction.

10.8. *Confidentiality*.

Except to the extent necessary to confirm an award or as may be required by law, neither a Party nor an Arbitrator may disclose the existence, content, or results of the arbitration without the prior written consent of the other Parties, except to its directors and officers. In no event shall 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 Massachusetts statute of limitations.

Section 11
Miscellaneous

11.1. *Compliance with Law*.

In connection with its Exploitation of Licensed Products, Licensee agrees to comply with all Applicable Laws. Without limiting the foregoing, by entering into this Agreement, the Parties specifically intend to comply with all Applicable Laws pertaining to Licensed Products, including (i) the federal anti-kickback statute (42 U.S.C. §1320a-7b) and the related safe harbor regulations; and (ii) the Limitation on Certain Physician Referrals, also referred to as the "*Stark Law*" (42 U.S.C. §1395nn). Accordingly, no part of any consideration paid hereunder is a prohibited payment for the recommending or arranging for the referral of business or the ordering of items or services; nor are the payments intended to induce illegal referrals of business.

11.2. *Assignment*.

This Agreement will be binding upon and will inure to the benefit of each Party and each Party's respective transferees, successors and assigns, pursuant to the provisions set forth below. Licensee may not transfer or assign this Agreement without the prior written consent of Licensors, except as provided in this Section 11.2. In the event that a third party (the "*Acquiring Party*") acquires all or substantially all of Licensee's business, capital stock or assets, whether by sale, merger, change of control, operation of law or otherwise (an "*Acquisition*"), the rights granted to Licensee under this Agreement pertaining to any and all Licensed Products shall inure to the benefit of the Acquiring Party. For the avoidance of doubt, in the event of an Acquisition, the Acquiring Party will be responsible for all payments and other obligations set forth in this Agreement, including, but not limited to, all payments set forth herein, and any obligations that matured prior to the Acquisition date. Upon an Acquisition, and payment thereof shall remain an ongoing obligation of the Acquiring Party until such amount is paid in full. Any attempted assignment in contravention of this Section 11.2 will be null and void.

11.3. *Entire Agreement*.

This Agreement constitutes the entire agreement between the Parties hereto with respect to the subject matter thereof and supersedes all previous negotiations, commitments, and writings with respect to such subject matter. Neither Party shall be obligated by any undertaking or representation regarding that subject matter other than those expressly stated herein or as may be subsequently agreed to by the Parties hereto in writing. In the event of any conflict or inconsistency between any provision of any Exhibit hereto and any provision of this Agreement, the provisions of this Agreement shall prevail.

11.4. *Amendment*.

No amendment, modification or supplement of any provision of this Agreement will be valid or effective unless made in writing and signed by a duly authorized officer of each Party.

11.5. *Notices*.

Any notice required to be given pursuant to the provisions of this Agreement will be in writing and will be deemed to have been given at the time when actually received as a consequence of any effective method of delivery, including but not limited to hand delivery, transmission by telecopier, facsimile or electronic transmission, including PDF (portable document format), delivery by a professional courier service or delivery by first class, certified or registered mail (postage prepaid) addressed to the Party for whom intended at the address below, or at such changed address as the Party will have specified by written notice in accordance with this Section 11.5; *provided, however*, that any notice of change of address will be effective only upon actual receipt.

If to Factor:

Factor Bioscience Limited
c/o Factor Bioscience Inc.
Attn: Matt Angel, Ph.D., CEO
1035 Cambridge Street, Suite 17B
Cambridge, MA 02141
matt.angel@factorbio.com

With copy to which shall not constitute notice:

Morgan, Lewis & Bockius LLP
Attn: Stephen L. Altieri, Ph.D., J.D.
One Federal Street
Boston, MA 02110-1726

If to Novellus:

Novellus Therapeutics Limited
c/o Novellus, Inc.
Attn: Christopher Rohde, Ph.D., President
1035 Cambridge Street, Suite 17B
Cambridge, MA 02141
chris.rohde@novellustx.com

With copy to which shall not constitute notice:

Morse, Barnes-Brown & Pendleton, P.C.
Attn: Stanley F. Chalvire, Pharm.D., J.D.
480 Totten Pond Road, Fourth Floor
Waltham, MA 02451

If to Licensee:

Brooklyn Immunotherapeutics, LLC
Attn: Charles Cherington
140 58th Street
Building A, Suite 2100
Brooklyn, NY 11220

With copy to which shall not constitute notice:

K&L Gates LLP
Attn: Rema Awad
K&L Gates LLP
1 Park Plaza, Twelfth Floor
Irvine, CA 92614
rema.awad@klgates.com.

11.6. *Governing Law*.

11.6.1. The substantive law governing this Agreement (which shall be applied in the arbitration) shall be, with respect to disputes involving general contract or trade secret matters, the internal laws of the Commonwealth of Massachusetts, and with respect to matters involving patents, the United States Patent Act, as to copyright matters, the United States Copyright Act, and as to trademark matters, the United States Trademark Act, each as amended from time to time. Any award rendered by the Arbitrator shall be final, conclusive and binding upon the Parties to this Agreement, and judgment thereon may be entered and enforced in any state or federal court of competent jurisdiction.

11.6.2. If any provisions of this Agreement are or will come into conflict with the laws or regulations of any jurisdiction or any governmental entity having jurisdiction over the Parties or this Agreement, those provisions will be deemed automatically deleted, if such deletion is allowed by relevant law, and the remaining terms and conditions of this Agreement will remain in full force and effect. If such a deletion is not so allowed or if such a deletion leaves terms thereby made clearly illogical or inappropriate in effect, the Parties agree to substitute new terms as similar in effect to the present terms of this Agreement as may be allowed under Applicable Law.

11.7. *Descriptive Headings*.

This Agreement has been prepared jointly by the Parties and shall not be strictly construed against either Party. Ambiguities, if any, in this Agreement shall not be construed against any Party, irrespective of which Party may be deemed to have authored the ambiguous provision. Licensee hereby acknowledges that Licensor owns and/or has in-licensed the Licensed Technology, Auxiliary Technologies, and the Auxiliary Technology Patents, and the use of the term "license" hereunder with reference to the rights granted to Licensee is understood by the Parties to mean either a direct license of Licensor's ownership interest in the subject Licensed Technology, Auxiliary Technology, or Auxiliary Technology Patent or a sublicense of Licensor's in-licensed interest in the subject Licensed Technology, Auxiliary Technology or Auxiliary Technology Patent, as applicable. The headings of each Section in this Agreement have been inserted for convenience of reference only and are not intended to limit or expand on the meaning of the language contained in the particular Section. Except where the context otherwise requires, the use of any gender shall be applicable to all genders, and the word "or" is used in the inclusive sense (and/or). The term "including" as used herein means including, without limiting the generality of any description preceding such term.

11.8. *Independent Contractors*.

Licensor(s) and Licensee are independent contractors under this Agreement. Nothing contained in this Agreement will be deemed to create an employment, agency, joint venture or partnership relationship between the Parties hereto or any of their agents or employees, or any other legal arrangement that would impose liability upon one Party for the act or failure to act of the other Party. Neither Party will have any express or implied power to enter into any contracts or commitments or to incur any liabilities in the name of, or on behalf of, the other Party, or to bind the other Party in any respect whatsoever.

11.9. *Severability*.

The illegality or partial illegality of any provision of this Agreement will not affect the validity of the remainder of the Agreement, or any provision thereof, and the illegality or partial illegality of any provision of this Agreement will not affect the validity of the Agreement in any jurisdiction in which such determination of illegality or partial illegality has not been made, except in either case to the extent such illegality or partial illegality causes the Agreement to no longer contain all of the material provisions reasonably expected by the Parties to be contained therein. Moreover, in the event that a court of competent jurisdiction determines that any provision of this Agreement is illegal or partially illegal, then it is the intention of the Parties that such provision be modified to the minimum extent deemed necessary by such court to make such provision enforceable and to give effect to the original intention of the Parties.

11.10. *Waiver of Compliance*.

The failure of either Party to comply with any obligation, covenant, agreement or condition under this Agreement may be waived by the Party entitled to the benefit thereof only by a written instrument signed by the Party on granting such waiver, but such waiver or failure to insist upon strict compliance with such obligation, covenant, agreement or condition will not operate as a waiver of, or estoppel with respect to, any subsequent or other failure. The failure of any Party to enforce at any time any of the provisions of this Agreement will in no way be construed to be a waiver of any such provision, nor in any way to affect the validity of the Agreement or any part thereof or the right of any Party thereafter to enforce each and every such provision. No waiver of any breach of such provisions will be held to be waiver of any other or subsequent breach.

11.11. *Counterparts*.

This Agreement may be executed by original or facsimile signature in any number of counterparts, each of which need not contain the signature of more than one Party but all such counterparts taken together will constitute one and the same agreement.

11.12. *Authority*.

The persons signing on behalf of Novellus, Factor and Licensee hereby warrant and represent that they have authority to execute this Agreement on behalf of the Party for whom they have signed.

11.13. *Non-Disparagement*.

Licensee on behalf of itself, its Affiliates and sublicensees hereby covenants and agrees that it shall not make, write or publish any statement, assertion or claim that disclaims, disparages, denies, questions or otherwise challenges or casts doubt upon the validity, enforceability, scope, construction or inventorship of any patent Controlled by a Licensor (including, but not limited to, any pending or issued claim(s) within the Licensed Patents or the Auxiliary Technology Patents). The provisions set forth in this Section 11.13 shall take effect on the Effective Date, shall not require any further consideration or performance of a Licensor, and shall survive the expiration or termination of this Agreement for five (5) years from the date or expiration or termination of this Agreement. If any part of this Section 11.13 shall be deemed illegal or unenforceable by a court of competent jurisdiction, that part shall be deemed automatically deleted, such deletion being made as narrowly as possible (and, if possible, only in said jurisdiction) to maintain, as much as possible, the intent of this Section 11.13, and the remainder of this Section 11.13 shall, with related definitions, remain in full force and effect.

11.14. *Non-Solicitation*.

During the Term, neither Licensor(s) nor Licensee, without the prior written consent of the other Party, directly or indirectly solicit for employment any employee of the other Party or any of its Affiliates or subsidiaries, or any person who has terminated his or her employment with the other Party or any of its Affiliates or subsidiaries within the previous twelve (12)-month period prior to any purported solicitation; *provided, however*, the foregoing will not prevent Licensor(s) or Licensee from employing any such person who contacts such Party on his or her own initiative without any direct or indirect solicitation by or encouragement from the soliciting or hiring person. General advertising which is not directed at any specific employee of a Party will not be deemed solicitation, and hiring of employees of such Party which are solicited in this manner will not be a breach of this provision.

11.15 *Force Majeure*.

Neither Party hereto shall be liable for failures and delays in performance due to strikes, lockouts, fires, acts of God or the public enemy, riots, incendiaries, interference by civil or military authorities, acts of domestic or international terrorism, endemic, pandemic, and the results related to such acts, compliance with the laws of various states/countries, or with the orders of any governmental authorities, delays in transit or delivery on the part of transportation companies, failures of communication facilities, or any failure of sources of material.

11.16 *No Preferential Treatment, Fraudulent Conveyance, Insolvency*.

11.16.1 The Parties have not entered into this Agreement to provide any preferential treatment under section 547 of title 11 of the United States Code, as amended (the "Bankruptcy Code") or any other applicable insolvency law.

11.16.2 Neither the execution or delivery of this Agreement or the consummation of the transactions hereunder were entered into with the intent by the Parties to effectuate a transaction that may be avoided under section 548(a) of the Bankruptcy Code, the Uniform Fraudulent Transfer Act (the "UFTA"), the Uniform Voidable Transactions Act ("UVTA") or any other applicable insolvency law. The Parties received reasonably equivalent value in exchange for the obligations provided hereunder. The transactions contemplated hereunder are not subject to avoidance under section 548(a) of the Bankruptcy Code, the UFTA, or any applicable insolvency law.

11.16.3 As of the Effective Date, Licensors do not intend to file for protection or seek relief under title 11 of the Bankruptcy Code or any similar federal or state law providing for the relief of debtors. The Licensors are not now insolvent (as such term is defined in the Bankruptcy Code or any other applicable law relating to insolvency).

11.16.4 Notwithstanding any other provision of this Agreement to the contrary, in the event that a Licensor becomes a debtor under the Bankruptcy Code and rejects this Agreement pursuant to section 365 of the Bankruptcy Code (a "Bankruptcy Rejection"): (a) any and all of the licensee and sublicensee rights of Licensee arising under or otherwise set forth in this Agreement, shall be deemed fully retained by and vested in Licensee as protected intellectual property rights under section 365(n)(1)(B) of the Bankruptcy Code and further shall be deemed to exist immediately before the commencement of the bankruptcy case in which such Licensor is the debtor; (b) Licensee shall have all of the rights afforded to non-debtor licensees and sublicensees under section 365(n) of the Bankruptcy Code and all other applicable laws; and (c) to the extent any rights of Licensee under this Agreement that arise after the termination or expiration of this Agreement are determined by a bankruptcy court to not be "intellectual property rights" for purposes of section 365(n), all of such rights shall remain vested in and fully retained by Licensee after any Bankruptcy Rejection as though this Agreement were terminated or expired. Licensee shall under no circumstances be required to terminate this Agreement after a Bankruptcy Rejection in order to enjoy or acquire any of its rights under this Agreement, but retains the right to do so in accordance herewith.

11.16.5 Factor agrees that, upon the termination of that certain Third Amended and Restated Exclusive License Agreement entered into on November 1, 2020, by and between Factor and Novellus (as may be amended from time to time, the "Prime License") for any reason other than Licensee's breach of this Agreement, then the rights and licenses granted to Licensee by Novellus hereunder shall survive such termination of such Prime License, and Factor shall grant and hereby grants to Licensee such rights and licenses on the same terms and conditions as granted by Novellus to Licensee herein.

11.17 *Release of Claims*.

For good and valuable consideration, including the licenses granted hereunder, the receipt and sufficiency of which is hereby acknowledged, the Licensee hereby irrevocably releases each of the Licensors, including their Affiliates and their respective employees, officers, directors, managers, consultants, advisors, agents, representatives, attorneys, accountants, equity holders, licensors, licensees, sublicensees, predecessors, successors, assigns and affiliates, and each Licensor hereby irrevocably releases the Licensee, including its Affiliates and their respective employees, officers, directors, managers, consultants, advisors, agents, representatives, attorneys, accountants, equity holders, licensors, licensees, sublicensees, predecessors, successors, assigns and affiliates (and whether in their individual or corporate capacity, collectively, the "*Released Parties*"), of and from any and all claims, liabilities, obligations, causes of action and obligations, whether known or unknown, suspected or unsuspected, concealed or hidden, arising out of any matter, cause or thing whatsoever at any time up to and including the Effective Date, including but not limited to any such claims and demands directly or indirectly arising out of or in any way connected with the Factor Option Agreement or the Novellus Option Agreement. Licensee further agrees not to voluntarily institute, instigate, urge, participate in or profit from any lawsuit, arbitration, complaint or other action or proceeding against the Released Parties of any kind relating to any matter to which this Section 11.17 pertains.

Remainder of page intentionally left blank.

IN WITNESS WHEREOF, the Parties hereto have duly executed this Exclusive License Agreement as of the Effective Date.

Factor Bioscience Limited

By: /s/ Matt Angel
Name: Matt Angel
Title: President and Chief Executive Officer

Novellus Therapeutics Limited

By: /s/ Christopher Rohde
Name: Christopher Rohde
Title: President

Brooklyn Immunotherapeutics LLC

By: /s/ Howard Federoff, M.D.
Name: Howard Federoff, M.D.
Title: Chief Executive Officer

Exhibit A

Financial Terms

Sec. 5.1 Licensee shall pay to Factor the upfront fee of $2,000,000 on the Effective Date, and Licensee shall pay to Novellus the upfront fee of $2,000,000 on the Effective Date (collectively, the "*Upfront Fee*").

Sec. 5.2 Licensee shall make two additional payments to the Licensors, payable as follows: (a) $5,000,000 shall be due and payable on the date that is six (6) months after the Effective Date ("*Payment One*"), fifty percent (50%) of which shall be payable to Novellus and fifty percent (50%) of which shall be payable to Factor; and (b) $7,000,000 shall be due and payable on the date that is eighteen (18) months after the Effective Date ("*Payment Two*"), fifty percent (50%) of which shall be payable to Novellus and fifty percent (50%) of which shall be payable to Factor.

Sec .5.2.1 For each Licensed Product, the first time each Development Milestone set forth below is achieved, Licensee shall pay to the designated Licensor payee the corresponding Milestone Payment set forth below; provided that such Milestone Payments shall be payable only one time per Licensed Product, regardless of the number of times such milestone is achieved; provided further that if a particular HSC Product, MSC Product, Sickle Cell Product, T-Cell Product, TIL Product, Inherited Retinal Disorders Product, Non-syndromic Hearing Loss Product or Familial Amyloid Disorders Product does not achieve any of such Development Milestones, such non-achieved Development Milestones shall be paid on any subsequent HSC Product, MSC Product, Sickle Cell Product, T-Cell Product, TIL Product, Inherited Retinal Disorders Product, Non-syndromic Hearing Loss Product or Familial Amyloid Disorders Product, as applicable, that achieves such Development Milestone.

Milestone	**Milestone Payment (USD)**	**Licensor Payee**
[***]		

Exhibit 1.4	Auxiliary Technologies
Exhibit 1.5	Auxiliary Technology Patents
Exhibit 1.12	Listing of Edits
Exhibit 1.20	Improvement Patents
Exhibit 1.27	Licensed Patents
Exhibit 1.30	Licensee Edits
Exhibit 4.1.2	Licensed Products

The above exhibits have been omitted pursuant to Item 601(a)(5) of Regulation S-K.