EXACT SCIENCES CORPORATION
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

441 Charmian Drive, Madison, Wisconsin
(Address of principal executive offices)

02-0478229
(IRS Employer Identification No.)

53719
(Zip Code)

 Registrant’s telephone number, including area code: (608) 284-5700

Common Stock, $0.01 Par Value

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

The Nasdaq Stock Market LLC

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to file such report(s), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such report(s), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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

Large accelerated filer ☒ Accelerated filer ☒ Non-accelerated filer ☐ Smaller reporting company ☐ (Do not check if a smaller reporting company)

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, as of the last business day of the Registrant’s most recently completed second fiscal quarter was approximately $15,069,783,760 (based on the closing price of the Registrant’s Common Stock on June 28, 2019 of $118.04 per share).

The number of shares outstanding of the Registrant’s $0.01 par value Common Stock as of February 19, 2020 was 147,967,507.

DOCUMENT INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days after the end of the fiscal year ended December 31, 2019. Portions of such proxy statement are incorporated by reference into Part III of this Form 10-K.
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EXACT SCIENCES CORPORATION  
ANNUAL REPORT ON FORM 10-K  
YEAR ENDED DECEMBER 31, 2019  

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PART I

This Annual Report on Form 10-K contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that are intended to be covered by the “safe harbor” created by those sections. Forward-looking statements, which are based on certain assumptions and describe our future plans, strategies and expectations, can generally be identified by the use of forward-looking terms such as “believe,” “expect,” “may,” “will,” “should,” “would,” “could,” “seek,” “intend,” “plan,” “goal,” “project,” “estimate,” “anticipate” or other comparable terms. All statements other than statements of historical facts included in this Annual Report on Form 10-K regarding our strategies, prospects, expectations, financial condition, operations, costs, plans and objectives are forward-looking statements. Examples of forward-looking statements include, among others, statements we make regarding expected future operating results, anticipated results of our sales, marketing and patient adherence efforts, expectations concerning payer reimbursement and regulatory matters, the anticipated results of our product development efforts and the anticipated benefits of our combination with Genomic Health, Inc., including estimated synergies and other financial impacts. Forward-looking statements are neither historical facts nor assurances of future performance. Instead, they are based only on our current beliefs, expectations and assumptions regarding the future of our business, future plans and strategies, projections, anticipated events and trends, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results and financial condition may differ materially from those indicated in the forward-looking statements. Therefore, you should not rely on any of these forward-looking statements. Important factors that could cause our actual results and financial condition to differ materially from those indicated in the forward-looking statements include, among others, the following: our ability to successfully and profitably market our products and services; the acceptance of our products and services by patients and healthcare providers; our ability to meet demand for our products and services; the willingness of health insurance companies and other payers to cover our products and services and adequately reimburse us for such products and services; the amount and nature of competition in the cancer detection, treatment guidance and monitoring space; the effects of the adoption, modification or repeal of any law, rule, order, interpretation or policy relating to the healthcare system, including without limitation as a result of any judicial, executive or legislative action; the effects of changes in pricing, coverage and reimbursement for our products and services, including without limitation as a result of the Protecting Access to Medicare Act of 2014; recommendations, guidelines and quality metrics issued by various organizations such as the U.S. Preventive Services Task Force, the American Society of Clinical Oncology, the American Cancer Society, and the National Committee for Quality Assurance regarding cancer screening or our products and services; our ability to successfully develop new products and services and assess potential market opportunities; our ability to effectively utilize strategic partnerships, such as through our Promotion Agreement with Pfizer, Inc., and acquisitions; our success establishing and maintaining collaborative, licensing and supplier arrangements; our ability to maintain regulatory approvals and comply with applicable regulations; our ability to manage an international business and our expectations regarding our international expansion and opportunities; the potential effects of foreign currency exchange rate fluctuations and our efforts to hedge such effects; the possibility that the anticipated benefits from our combination with Genomic Health cannot be realized in full or at all or may take longer to realize than expected; the possibility that costs or difficulties related to the integration of Genomic Health's operations will be greater than expected and the possibility of disruptions to our business during integration efforts and strain on management time and resources; the outcome of any litigation, government investigations, enforcement actions or other legal proceedings; and the other risks and uncertainties described in the Risk Factors and in Management’s Discussion and Analysis of Financial Condition and Results of Operations sections in this Annual Report on Form 10-K and our subsequently filed Quarterly Reports on Form 10-Q. Except as may be required by law, we undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.
Item 1. Business

Overview

Exact Sciences Corporation (together with its subsidiaries, “Exact,” “we,” “us,” “our” or the “Company”) is a leading global cancer diagnostics company. We have developed some of the most impactful brands in cancer diagnostics, and we are currently working on the development of additional tests for other types of cancer, with the goal of bringing new innovative cancer tests to patients throughout the world.

On November 8, 2019, we completed the acquisition of Genomic Health, Inc. (“Genomic Health”), a leading provider of genomic-based diagnostic tests that help to optimize cancer care, and its Oncotype IQ® Genomic Intelligence Platform comprised of its flagship line of Oncotype DX® gene expression tests.

Our Cologuard® Test

Colorectal cancer is the second leading cause of cancer deaths in the United States (“U.S.”) and the leading cause of cancer deaths in the U.S. among nonsmokers. Each year in the U.S. there are approximately:

• 148,000 new cases of colorectal cancer
• 53,000 deaths from colorectal cancer

It is widely accepted that colorectal cancer is among the most preventable, yet least prevented cancers. Colorectal cancer can take up to 10-15 years to progress from a pre-cancerous lesion to metastatic cancer and death. Patients who are diagnosed early in the progression of the disease—-with pre-cancerous lesions or polyps or early-stage cancer—-are more likely to have a complete recovery and to be treated less expensively. Poor compliance with screening guidelines has meant that nearly two-thirds of colorectal cancer diagnoses are made in the disease’s late stages. The five-year survival rates for stages 3 and 4 are 71 percent and 14 percent, respectively, compared to a 90 percent survival rate if the disease is diagnosed in stage 1. We believe the large underserved population of unscreened and inadequately screened patients represents a significant opportunity for a patient-friendly screening test.

Our Cologuard test is a non-invasive stool-based DNA (“sDNA”) screening test that utilizes a multi-target approach to detect DNA and hemoglobin biomarkers associated with colorectal cancer and pre-cancer. Eleven biomarkers are targeted that have been shown to be strongly associated with colorectal cancer and pre-cancer. Methylation, mutation, and hemoglobin results are combined in the laboratory analysis through a proprietary algorithm to provide a single positive or negative reportable result.

Changes in DNA methylation, and the occurrence of mutations, alter gene expression and other mechanisms for cell cycle regulation and differentiation. As a result, the affected cells continue to proliferate, often resulting in malignancies associated with colorectal cancer and pre-cancer. Hemoglobin is the protein complex responsible for transporting oxygen in red blood cells. During the progression of cancer, the probability of bleeding into the colon increases. The presence of hemoglobin, released from red blood cells, can be detected in the stool. Using sDNA, Cologuard purifies, amplifies and detects increased levels of methylation, and presence of mutations, in specific genes. By combining these DNA indicators with a test for hemoglobin, Cologuard produces a multi-marker result effective for the detection of colorectal cancer and pre-cancerous adenomas.

In August 2014 the U.S. Food and Drug Administration (“FDA”) granted premarket approval (“PMA”) to Cologuard for use as a colorectal cancer screening test in adults 50 years of age and older who are at average-risk for colorectal cancer. Upon approval, Cologuard became the first and only FDA-approved sDNA non-invasive colorectal cancer screening test. In September 2019, the FDA expanded Cologuard’s indication to include average-risk individuals ages 45-49. Cologuard is now indicated for average risk adults 45 years of age and older.

Our original PMA submission to the FDA for Cologuard included the results of our pivotal Deep-C clinical trial that had over 10,000 patients enrolled at 90 sites in the U.S. and Canada. The results of our Deep-C clinical trial for Cologuard were published in the New England Journal of Medicine in April 2014. The peer-reviewed study, “Multi-target Stool DNA Testing for Colorectal-Cancer Screening,” highlighted the performance of Cologuard in the trial population:

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Cancer Sensitivity: 92%
Stage I and II Cancer Sensitivity: 94%
High-Grade Dysplasia Sensitivity: 69%
Specificity: 87%

We believe the competitive advantages of sDNA screening provide a significant market opportunity. There are nearly 106 million Americans between the ages of 45 and 85 who are at average-risk for colorectal cancer. At a three-year screening interval and an average revenue per test of approximately $500 this represents a potential $18 billion market for Cologuard, of which our current share is approximately 5.4 percent. We estimate that the FDA’s recent expansion of Cologuard’s indication to average-risk individuals ages 45-49 added approximately 19 million eligible people in the U.S.

An estimated 45 percent of Americans between the ages of 45 and 85 who are at average-risk for colorectal cancer are not up-to-date with screening according to the American Cancer Society’s (“ACS”) colorectal cancer screening guidelines. We believe Cologuard helps more people get screened for colorectal cancer. Internal studies have shown that nearly 50% of surveyed Cologuard users were previously unscreened for colorectal cancer.

Commercial Operations

Our sales team actively engages with healthcare providers and their staffs to emphasize the need for colorectal cancer screening, educate them on the value of Cologuard, and facilitate their ability to order the test. We focus on specific healthcare providers based on a combination of Cologuard order history and ordering potential. We also focus on healthcare provider groups and larger regional and national health systems. In August 2018 we expanded our healthcare provider engagement and Cologuard marketing campaign through a Promotion Agreement (“Promotion Agreement”) with Pfizer, Inc. (“Pfizer”). The Promotion Agreement is discussed in more detail below.

Securing inclusion in guidelines and quality measures is a key part of our healthcare provider engagement strategy since many healthcare providers rely on such guidelines and quality measures when making screening recommendations. In June 2016, the U.S. Preventive Services Task Force (“USPSTF”) issued an updated recommendation statement for colorectal cancer screening and gave an "A" grade to colorectal cancer screening starting at age 50 and continuing until age 75. The statement specifies seven screening methods, including FIT-DNA, and Cologuard is the only version of FIT-DNA available in the U.S.

Many professional colorectal cancer screening guidelines in the U.S., including those of the American Cancer Society (“ACS”) and the National Comprehensive Cancer Network (“NCCN”), recommend regular screening using any of a variety of methods. Since 2008, joint colorectal cancer screening guidelines endorsed by the ACS have included sDNA screening technology as a screening option for the detection of colorectal cancer in average risk, asymptomatic individuals starting at age 50. The ACS updated its colorectal cancer screening guidelines in October 2014 to specifically include Cologuard as a recommended screening test, and further updated its guidelines in May 2018 to recommend screening beginning at age 45 for people at average risk of colorectal cancer. In June 2016, the NCCN updated its Colorectal Cancer Screening Guidelines to add sDNA screening, at a once-every-three-years interval, to its list of recommended screening tests.

In October 2016, the National Committee for Quality Assurance (“NCQA”) included sDNA testing on a three-year interval as one of the methods permitted for colorectal cancer screening in the 2017 Healthcare Effectiveness Data and Information Set (“HEDIS”) quality measures. More than 90 percent of U.S. health plans measure quality based on HEDIS. In April 2017, the Centers for Medicare & Medicaid Services (“CMS”) included Cologuard in its updated 2018 Medicare Advantage Star Ratings program.

A critical part of the value proposition of Cologuard is its adherence program, which involves active engagement with patients and providers. This customer-oriented support activity is focused on encouraging and helping patients to complete Cologuard tests that have been ordered for them by their providers. We may undertake several activities to promote patient adherence including letters, text messages, emails, phone calls, and incentives such as gift cards.
We have undertaken a significant public relations effort to engage patients in the U.S., and launched demographically-targeted direct-to-patient advertising campaigns in digital, social, print, and other channels. We promote Cologuard through a national television advertising campaign, with a majority of placements in national cable and syndicated programming widely viewed by our target patient demographic. In 2019, we accelerated our investment in digital and social media, and embarked upon other marketing initiatives designed to increase awareness of Cologuard. Following the FDA’s recent expansion of Cologuard’s indication to average-risk individuals ages 45-49, we have updated our direct-to-consumer efforts and seek to motivate this younger population to screen with Cologuard.

We promote Cologuard through our nationwide screening sales force. In 2020, we are focused on expanding our primary care sales force, while continuing to leverage our team we established in 2019 specifically for the gastroenterology practice. In addition, Pfizer promotes Cologuard and provides certain sales, marketing, analytical and other commercial operations support pursuant to a Promotion Agreement dated August 2018. Under this agreement, we agreed to pay Pfizer for promotion, sales and marketing costs incurred on our behalf. We also agreed to pay Pfizer a service fee based on incremental gross profits over specified baselines during the term of the Promotion Agreement and royalties for Cologuard related revenues for a specified period after the expiration or termination of the Promotion Agreement. The initial term of the Promotion Agreement runs through December 31, 2021, but may be terminated by either party at any time on or after February 21, 2020 upon six months’ written notice to the other party.

Coverage

Successful commercialization of our Cologuard test depends, in large part, on adequate reimbursement from government insurance plans, managed care organizations and private insurance plans.

In October 2014, CMS issued a National Coverage Determination (“NCD”) for Cologuard following a parallel review process with the FDA. Medicare covers approximately half of patients in the current screening population for Cologuard. Cologuard was the first screening test approved by the FDA and covered by CMS through a parallel review process. As outlined in the NCD, Medicare Part B covers Cologuard once every three years for beneficiaries who meet all of the following criteria:

- age 50 to 85 years,
- asymptomatic (no signs or symptoms of colorectal disease including, but not limited to, lower gastrointestinal pain, blood in stool, positive guaiac fecal occult blood test or fecal immunochemical test), and
- at average risk for developing colorectal cancer (e.g., no personal history of adenomatous polyps, colorectal cancer, or inflammatory bowel disease, including Crohn’s Disease and ulcerative colitis; no family history of colorectal cancers or adenomatous polyps, familial adenomatous polyposis or hereditary non-polyposis colorectal cancer).

The CMS reimbursement rate for Cologuard, per the Clinical Laboratory Fee Schedule (“CLFS”), is set at $508.87 for 2018 through 2021. Under the Protecting Access to Medicare Act of 2014 (“PAMA”), payment rates for clinical diagnostic laboratory tests are calculated based on the volume-weighted median of private payer rates for each clinical diagnostic laboratory test based on data submitted by certain applicable laboratories. The current CMS reimbursement rate was set based on the volume-weighted median of private payer rates for Cologuard for the period from January 1, 2016 to June 30, 2016. Based on current PAMA regulations, we expect that the current CMS reimbursement rate for Cologuard will remain in place through December 2021, and then will be reset for calendar years 2022-2024 based on the volume-weighted median of private payer rates for Cologuard during the data collection period from January 1, 2019 to June 30, 2019.

Pursuant to the Budget Control Act of 2011, Medicare payments, including Medicare’s $508.87 reimbursement for Cologuard, became subject to a payment reduction of up to 2% due to implementation of the automatic expense reductions (i.e., a sequestration). The reduction is made to the total claims paid to plans and providers. Sequestration does not, however, re-establish the Medicare or Medicaid reimbursement rates.

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In addition to Medicare reimbursement, we have secured favorable coverage and in-network reimbursement agreements with a number of significant commercial payers. Most commercial payers have issued positive coverage decisions for Cologuard, and we continue to negotiate contracts with payers to include Cologuard as an in-network service. In-network agreements with payers have varying terms and conditions, including reimbursement rate, term and termination. Some payers may apply various medical management requirements, including a requirement that they give prior authorization for a Cologuard test before they are willing to pay for it. Other payers may perform post-payment reviews or audits, which could lead to payment recoupments.

We believe that commercial payers’ reimbursement of Cologuard will depend on a number of factors, including payers’ determination that it is: sensitive and specific for colorectal cancer; not experimental or investigational; approved or recommended by major organizations’ guidelines; reliable, safe and effective; medically necessary; appropriate for the specific patient; and cost-effective. Reimbursement may also be affected by whether Cologuard is in-network for a given payer.

Coverage of Cologuard may also depend, in whole or in part, on whether coverage is required under applicable federal or state laws mandating coverage of certain colorectal cancer screening services. Several laws and regulations establish coverage requirements relevant to Cologuard.

- Section 2713 of the Patient Protection and Affordable Care Act (“ACA”) mandates that certain health insurers cover, without imposing any patient cost-sharing, evidence-based items or services that have in effect a rating of “A” or “B” in the current recommendations of USPSTF (“ACA Mandate”). While we believe the ACA Mandate requires most health insurers to cover Cologuard without patient cost-sharing, certain health insurers have disagreed and determined not to cover Cologuard and others may take that position in the future. It may be difficult for us or patients to enforce the ACA Mandate directly, and we may need to rely on states to take enforcement action, which they may choose not to do. It is also possible that the ACA Mandate will be repealed, overturned or significantly modified in the future. Congress may modify or repeal all or part of the ACA, and any such modification or repeal may repeal or limit the ACA Mandate for preventive services. Additionally, the ACA has been, and continues to be, the subject of various legal challenges, which, if ultimately successful, could overturn the ACA Mandate.

- Federal regulations require that Medicare Advantage plans cover “A” or “B” rated preventive services without patient cost-sharing, and CMS has issued a notice affirming that Medicare Advantage plans must include coverage of Cologuard every three years without patient cost-sharing.

- We believe the laws of approximately 30 states currently mandate coverage of Cologuard by certain health insurance plans. While some insurers have agreed with our interpretation regarding certain state mandates, other insurers have disagreed. In some cases, we have filed lawsuits in an effort to enforce state laws we believe require coverage of Cologuard, and we may file additional suits in the future. We may or may not be successful in any such lawsuit.

The federal laws and regulations referenced above currently mandate coverage for individuals beginning at age 50. While most of the state mandates apply beginning at age 50, we believe some should be interpreted to require coverage beginning at age 45.

We believe quality metrics may influence payers’ coverage and contracting decisions, as well as healthcare providers’ cancer screening procedures. Some government and private payers are adopting pay-for-performance programs that differentiate payments for healthcare services based on the achievement of documented quality metrics, cost efficiencies or patient outcomes. Payers may look to quality measures, such as HEDIS and CMS Star Ratings, to assess quality of care. We believe Cologuard’s inclusion in the HEDIS measures and Star Ratings measures positively impacts payers’ willingness to reimburse for it, as well as on healthcare providers’ willingness to prescribe it.
Our Oncotype DX Tests

With our Oncotype IQ Genomic Intelligence Platform we are applying our world-class scientific and commercial expertise and infrastructure to lead the translation of clinical and genomic data into clinically actionable results for treatment planning throughout the cancer patient's journey, from diagnosis to treatment selection and monitoring. Our Oncotype IQ Genomic Intelligence Platform is currently comprised of our flagship line of Oncotype DX gene expression tests for breast, prostate and colon cancers, as well as Oncotype DX AR-V7 Nucleus Detect® test, a liquid-based test for advanced stage prostate cancer.

In the U.S., approximately 1.8 million new cancer cases are expected to be diagnosed in 2020 according to ACS. Cancer incidence and mortality are growing worldwide. In 2018, there were approximately 17 million newly diagnosed cancer cases and 9.5 million cancer-related deaths occurred worldwide. The most common types of cancer include breast, prostate, lung, colorectal and pancreatic. Cancer treatment decisions may include whether to perform surgery and whether to administer chemotherapy, radiation therapy or utilize other targeted therapies.

To treat cancer effectively, healthcare providers diagnose and gauge the stage of a patient’s disease to determine the best course of therapy. Surgery, radiation therapy, and chemotherapy are commonly used as treatment options, with varying degrees of benefit and side effects that may not always justify the cost of the therapy or the physical and mental burden patients endure.

Historically, the key determinant used by healthcare providers in making cancer treatment decisions has been tumor pathology grade and stage, which is used to predict the likelihood of recurrence. Because tumor pathology grade and stage determinations are heavily dependent on visual assessment and human interpretation, healthcare providers and patients may make treatment decisions that rely on subjective and qualitative information and do not account for the molecular nature of the patient’s cancer. As a result, many patients may be misclassified as high risk for disease recurrence when in fact they are low risk or, conversely, low risk for disease recurrence when they are high risk, resulting in over-treatment for some and under-treatment for others.

We believe our Oncotype DX tests provide information that has the following benefits:

- **Improved Quality of Treatment Decisions.** We believe our approach to genomic-based cancer analysis improves the quality of cancer treatment decisions by providing an individualized analysis of each patient’s tumor that is correlated to clinical outcome, rather than solely using subjective, anatomic and qualitative factors to determine treatments. Our Oncotype DX tests for breast cancer, Ductal Carcinoma in Situ (“DCIS”), prostate cancer, and colon cancer have been analytically and clinically validated in multiple published studies. The Recurrence Score® results from our tests have been demonstrated to classify patients into recurrence risk categories different than classifications based primarily on clinical and pathologic features. Additionally, multiple decision impact studies conducted worldwide consistently show that the Recurrence Score result changes treatment decisions in more than 30% of patients. As a result, we believe our tests enable patients and healthcare providers to make more informed decisions about the risks and benefits of various treatments, and consequently design an individualized treatment plan.

- **Improved Health Economics of Cancer Care.** We believe that improving the quality of treatment decisions can result in significant economic benefits. For example, as described below, the results of a number of clinical studies have demonstrated that by using the Oncotype DX Breast Recurrence Score® test, physicians and patients can better evaluate treatment options, such as whether a patient will or will not benefit from chemotherapy, thereby improving the patient’s prospects for better clinical outcomes by avoiding unnecessary chemotoxities, secondary cancers, distant recurrences, and shortened survival and by saving the patient as well as the healthcare system significant costs.
Oncotype DX Breast Cancer Tests

Oncotype DX for Early-Stage, Invasive Breast Cancer

Our Oncotype DX Breast Recurrence Score test has been demonstrated to identify patients who are most likely to benefit from chemotherapy and to identify those patients who may receive no clinical benefit from chemotherapy. We have delivered more than one million Oncotype DX Breast Recurrence Score tests to cancer patients since launching the product in 2004.

Among women, breast cancer is the most commonly diagnosed cancer and the leading cause of cancer death. In 2020, more than 276,000 women are expected to be diagnosed with invasive breast cancer in the United States according to ACS, along with more than 48,000 new cases of non-invasive (in situ) breast cancer. Worldwide, it is estimated that there were approximately 2.1 million newly diagnosed cases of breast cancer in 2018.

Prior to the inclusion of our Oncotype DX Breast Recurrence Score test in clinical guidelines, standard treatment guidelines weighed the stage of the cancer and additional factors to determine treatment, using factors such as estrogen receptor status, referred to as ER+, where estrogen receptors are present, and ER−, where estrogen receptors are not present, the status of human epidermal growth factor 2, referred to as HER2, the age of the patient, the tumor size, and the histological type and grading of the tumor as reported by the pathologist.

Because these clinical and pathologic factors are subjective and have limited capability to predict recurrence and chemotherapy benefit, a large percentage of breast cancer patients received aggressive treatment with chemotherapy even though many of these patients do not benefit from such treatment while others who could have benefited from aggressive treatment did not receive it.

The Oncotype DX breast cancer test examines the activity of 21 genes in a patient’s breast tumor tissue to provide personalized information for tailoring treatment based on the biology of the patient’s individual disease. The test is supported by multiple rigorous clinical validation studies confirming the test’s ability to predict the likelihood of chemotherapy benefit as well as the chance of cancer recurrence in early-stage breast cancer. The test has established utility in newly diagnosed patients with early-stage (stage I, II or IIIa), breast cancer who have node-negative or node-positive (up to three positive nodes), estrogen receptor-positive (ER+), HER2-negative disease.

As the only test proven to predict chemotherapy benefit, the Oncotype DX Breast Recurrence Score test is included in all major cancer guidelines worldwide, and is considered a standard of care for women with early-stage breast cancer.

Since 2004 we have conducted a number of independent clinical studies to evaluate the effectiveness of our Oncotype DX breast cancer test, the results of which have been reported in medical journals. In September 2015, initial results from the TAILORx trial were announced. The TAILORx trial was independently designed and led by ECOG-ACRIN Cancer Research Group under the sponsorship of the National Cancer Institute (“NCI”). TAILORx represents the largest breast cancer treatment trial ever conducted, and thousands of investigators enrolled more than 10,000 women across approximately 1,200 sites in six countries. In December 2015, we announced results from the Surveillance, Epidemiology and End Results (“SEER”) program of the NCI, a large population-based observational study based on the SEER registry of more than 40,000 node-negative and 4,500 node-positive patients, demonstrating breast cancer specific mortality at five years was less than 0.5% in node-negative disease and 1% in node positive disease (up to three positive nodes) where the patient’s Recurrence Score result was less than 18.

In June 2018, new results from the TAILORx trial were published in The New England Journal of Medicine and presented at the plenary session of the 2018 American Society of Clinical Oncology (“ASCO”) annual meeting. With regard to the primary endpoint, TAILORx enrolled approximately 7,000 women with Oncotype DX Breast Recurrence Score test results of 11 to 25. This primary study group was randomized to receive hormonal therapy with or without chemotherapy in order to more precisely define the benefit of chemotherapy, if any. These randomized patients with Oncotype DX Breast Recurrence Score results of 11 to 25 comprised approximately two-thirds of all TAILORx patients and were followed long-term, with nine-year outcomes reported. The TAILORx study established that hormonal therapy is not inferior to chemo-hormonal therapy for patients with Recurrence Score results of 11 to 25. It is estimated that approximately 85 percent of patients with invasive breast cancer who receive the Oncotype DX Breast Recurrence Score test have a result of 0 to 25 and would experience favorable outcomes on hormonal therapy alone. Tumor size or tumor grade did not predict chemotherapy benefit. Thus, the TAILORx trial established that chemotherapy treatment should be guided using the Oncotype DX breast cancer test as the genomic classifier.
Multiple studies reinforce the impact of the Oncotype DX Breast Recurrence Score test on changing treatment decisions for invasive breast cancer patients and demonstrate its cost effectiveness across multiple healthcare systems. We plan to continue to conduct or support additional clinical decision studies and health economic studies of our breast cancer test with clinical researchers domestically and abroad as we expand distribution of our test.

**Oncotype DX for DCIS Stage 0, Pre-Invasive Breast Cancer**

In December 2011, we expanded our Oncotype DX tests to include DCIS patients. The DCIS test provides an individualized prediction of the 10-year risk of local recurrence (DCIS or invasive carcinoma), represented by a DCIS Score® result, to help guide treatment decision-making in women with DCIS treated by local excision, with or without tamoxifen. Development of our Oncotype DX Breast DCIS Score® test was based on published results for the Oncotype DX Breast Recurrence Score test that showed similarity in the expression profiles of genes between DCIS and invasive breast cancer when both are present within the same patient tumor. In 2011, we presented positive results from the ECOG E5194 DCIS clinical validation study at the San Antonio Breast Cancer Symposium. The study demonstrated that a pre-specified Oncotype DX Breast DCIS Score test can predict the risk of local recurrence, defined as either the development of a new invasive breast cancer or the recurrence of DCIS in the same breast. The study further demonstrated that 75% of patients have a low DCIS Score and may be able to forego radiation therapy. Conversely, the study demonstrated that patients with a high DCIS Score had a 27% likelihood of local recurrence, of which approximately half were likely to develop a new invasive breast cancer.

In 2014, we announced positive results of an additional clinical validation study conducted in collaboration with the Ontario DCIS Study Group. In addition to confirming and extending previously published conclusions, the study’s results showed that the Oncotype DX Breast DCIS Score test predicts the risk of local recurrence in a group of patients treated with radiation therapy in clinical practice.

**Oncotype DX Colon Cancer Test**

In patients with stage II and stage III colon cancer, the decision to treat with chemotherapy following surgery is based on an assessment of how likely their disease is to recur and as a result, it is critical for clinicians to accurately discriminate recurrence risk. Our Oncotype DX Colon Recurrence Score® test is a multi-gene test for predicting recurrence risk in patients with stage II and stage III A/B colon cancer to enable an individualized approach to treatment planning. By evaluating specific genes within a patient’s colon tumor, the test can determine the likelihood that the cancer cells will spread and cause the disease to recur, or return after surgery. Based on this information, healthcare providers and patients can make a more informed decision about whether or not chemotherapy is needed following surgery (stage II) or whether or not oxaliplatin should be added to the chemotherapy regimen after surgery (stage III). In this way, the test may help some patients avoid the complications of treatments they do not need, while directing others to the therapy that is most likely to benefit them. The Oncotype DX colon cancer test is supported by three rigorous clinical validation studies confirming the test’s ability to provide additional and independent value beyond the currently used measures for determining colon cancer recurrence risk.

**Oncotype DX Prostate Cancer Test**

Worldwide, prostate cancer ranks as the second most frequent cancer and the fifth leading cause of cancer death in men. An estimated 192,000 new cases of prostate cancer are expected to be diagnosed in the U.S. in 2020 according to the ACS. Worldwide, it is estimated that there were nearly 1.3 million new cases of prostate cancer diagnosed during 2018.

The vast majority of men currently diagnosed with low-risk prostate cancer undergo surgery or radiation treatment, although there is only a three percent chance that their disease will become life-threatening. Although most newly diagnosed patients have indolent (low risk) disease, many receive aggressive treatment, including surgery and radiation therapy. Aggressive treatments often impact a man’s quality of life due to side effects or complications, such as urinary and erectile difficulties, which may be temporary or long term.
In response to this issue, in 2011 we launched our Oncotype DX Genomic Prostate Score® (“GPS™”) test, which was developed to help men newly diagnosed with early-stage prostate cancer to make the most informed treatment decision for their individual disease, including active surveillance. Our tissue biopsy-based, multi-gene test has been clinically validated to predict aggressive cancer at the time of diagnosis, helping to identify those men who need immediate surgery or radiation therapy versus those who can confidently choose active surveillance. Using minimal tumor tissue from the original needle biopsy, the test builds on traditional clinical and pathologic factors to provide additional clinically relevant insight into the underlying tumor biology of an individual patient before the prostate is removed. The result is a more precise and accurate assessment of risk, which helps more men avoid the lifelong complications associated with treatments they do not need, while directing aggressive therapy to those men who require immediate treatment.

With 18 publications featuring the GPS test, including more than 4,500 patients, we have developed, validated, and continued to study the only genomic test to assess the aggressiveness of prostate cancer and predict both near and long-term outcomes to enable more precise patient risk stratification and better informed treatment decisions, giving healthcare providers the confidence to place many low- to intermediate-risk patients on active surveillance.

**Oncotype DX AR-V7 Nucleus Detect Test**

In June 2016, we entered into a collaboration with Epic Sciences, under which we acquired exclusive license and distribution rights to commercialize the Oncotype DX AR-V7 Nucleus Detect test in the U.S.

The Oncotype DX AR-V7 Nucleus Detect test is performed by Epic Sciences. This blood-based test is designed to guide treatment decisions for men with metastatic castration-resistant prostate cancer (“mCRPC”), an advanced stage of the disease in which the cancer continues to grow and spread despite androgen deprivation therapy. mCRPC is often treated with androgen receptor-signaling inhibitor (“ARSI”) therapies. However, one in three patients become resistant to ARSI therapy after two rounds of treatment, leading to poor outcomes and unnecessary treatment costs.

The clinically and analytically validated blood-based Oncotype DX AR-V7 Nucleus Detect test identifies late-stage prostate cancer patients who are positive for the AR-V7 protein, a predictive and prognostic biomarker that signals that a patient has become resistant to ARSI therapy. If the test detects AR-V7-positive tumor cells circulating in the blood of a patient with advanced prostate cancer, it means the patient has built resistance to the commonly prescribed ARSI therapies and should either switch to chemotherapy or start another type of therapy, which has been shown to prolong survival.

**Commercial Operations**

We promote Oncotype DX through our precision oncology sales force. Our commercial infrastructure, including our sales force, managed care group, and patient support network, is critical to the future success of our Oncotype Dx products. In our domestic sales, marketing and reimbursement efforts, we interact directly with medical, radiation, and surgical oncologists, urologists, pathologists and payers. Because oncology and urology are distinct concentrated specialties, we believe that a focused marketing organization and specialized sales force with regional and local experience in the U.S. for each of oncology and urology is necessary to effectively serve both specialties. We employ a direct sales approach that targets oncologists, cancer surgeons and urologists, and utilizes medical education and scientific liaisons who target key opinion leaders. We also plan to continue conducting clinical studies with the objective of having results published in peer-reviewed journals. We believe the combination of these approaches is our best means to increase patient and healthcare provider awareness of our products and services and the number of favorable reimbursement coverage decisions by third-party payers. Due to significant overlap between breast and colon oncologists and surgeons, we believe our current oncology sales force has sufficient capacity to market our Oncotype DX breast and colon cancer tests.

**Coverage**

We depend on government insurance plans, managed care organizations and private insurance plans for coverage of our Oncotype DX tests.
Our contract and reimbursement teams are focusing on expanding payer coverage of our Oncotype DX tests. These teams, along with our customer service group and patient support network, handle benefits investigation, preauthorization, and other administrative matters for patients who use our tests. We have the infrastructure, if needed, to appeal certain claims for our tests that are denied by third-party payers. In addition, we provide patient and healthcare provider education through our website, material provided to local advocacy groups, local, national and social media campaigns and materials provided to oncologists, urologists, pathologists and surgeons.

Medicare coverage for our Oncotype DX tests is currently subject to the discretion of the local Medicare Administrative Contractors (“MAC”). Palmetto, the MAC that establishes the coverage and coding policies for the majority of our tests under Medicare, developed the Molecular Diagnostic Services Program (“MolDx”), to identify and establish Medicare coverage for molecular diagnostic tests that fall within the scope of its Molecular Diagnostic Test local coverage decision (“LCD”). To obtain coverage under the MolDx program, developers of molecular diagnostic tests must submit a detailed dossier of analytical and clinical data to substantiate that a test meets Medicare’s requirements for coverage. To date, Palmetto has determined that our invasive breast and colon cancer tests will be covered, and that our prostate cancer test will be covered for patients with specified risk levels. Coverage determinations for our tests made by Palmetto under the MolDx program have been adopted by Noridian Healthcare Solutions, the MAC that processes Medicare claims submitted by us.

The CMS reimbursement rate for Oncotype DX Breast Recurrence Score test was set at $3,873 for 2018 through 2021. Based on current PAMA regulations, we expect that the current CMS reimbursement rate for each of our Oncotype DX tests will remain in place through December 2021, and then will be reset for calendar years 2022-2024 based on the volume-weighted median of private payer rates for such test during the data collection period from January 1, 2019 to June 30, 2019.

Reimbursement for our Oncotype DX tests may come from several sources, including commercial third-party payers, such as insurance companies and health maintenance organizations, government payers, such as Medicare and Medicaid in the U.S., patient self-pay and from hospitals or referring laboratories who, in turn, may bill third-party payers for testing. State Medicaid programs and private payers typically make their own decisions with respect to coverage for our tests.

Reimbursement of our Oncotype DX tests by third-party payers is essential to our commercial success. Where there is a payer policy, contract or agreement in place, we bill the third-party payer, the hospital or referring laboratory and/or the patient (for deductibles and coinsurance or copayments, where applicable) in accordance with established policy, contract or agreement terms. Where there is no payer policy in place, we pursue third-party reimbursement on behalf of each patient on a case-by-case basis. Our efforts on behalf of these patients involve a substantial amount of time and expense, and bills may not be paid for many months, if at all. Furthermore, if a third-party payer denies coverage after final appeal, it may take a substantial amount of time to collect from the patient, if we are able to collect at all.

There have also been substantial changes to the payment structure for healthcare providers, including those passed as part of the Medicare Access and CHIP Reauthorization Act of 2015 (“MACRA”), which was signed into law on April 16, 2015. MACRA created the Merit-Based Incentive Payment System which, beginning in 2019, more closely aligns healthcare provider payments with composite performance metrics similar to three existing incentive programs (i.e., the Physician Quality Reporting System, the Value-based modifier program and the Electronic Health Record Meaningful Use program) and incentivizes healthcare providers to enroll in alternative payment methods. At this time, we do not know whether these changes to the healthcare provider payment systems will have any impact on orders or payments for our tests.

Under Medicare billing rules, payment for our Oncotype DX tests performed on Medicare beneficiaries who were hospital patients at the time the tumor tissue samples were obtained and whose tests were ordered less than 14 days from discharge must be bundled into the payment that the hospital receives for the services provided. Effective January 1, 2018, this Medicare rule changed such that a laboratory that performs molecular pathology tests on specimens collected during a hospital outpatient stay may bill Medicare directly for such tests if the test was performed following a hospital outpatient's discharge from the hospital outpatient department. The rule remains unchanged with respect to payment for our Oncotype DX tests performed on Medicare beneficiaries who were hospital inpatients at the time the tumor tissue was collected and whose tests were ordered less than 14 days from discharge – payment for those tests must be bundled into the payment that the hospital receives for its services provided. In these circumstances, hospitals are required to furnish services such as our tests as “services furnished under arrangements between a provider and an outside vendor” and only the hospital may seek to bill Medicare for such tests. Under these circumstances, where the date of service for Medicare billing purposes is the date the specimen was collected, we are required to bill hospitals for such tests. We refer to this rule, as has been in effect and most recently amended as of January 1, 2018, as the Medicare Date of Service billing regulation.
These billing rules may lead to confusion regarding whether Medicare provides adequate reimbursement for our tests, and could discourage providers from ordering our tests for Medicare patients. In addition, changes in Medicare billing rules and processes could result in delays in receiving payments or receiving payments that are less than the original invoice. In these cases, for hospitals who disclaim responsibility for our bills or delay payment of our bills for tests affected by the Medicare Date of Service rule, we may undertake collection activities, and as a result of such efforts, we may accept payments from hospitals that are less than the original invoice or we may be unable to collect from hospitals at all. Our inability to successfully collect payment from hospitals financially responsible for a test affected by the Medicare Date of Service rule may lead us to rejecting Medicare orders from a hospital until any outstanding bills are paid. Compared to our breast cancer tests, a greater proportion of eligible patients for our colon and prostate Oncotype DX tests are covered by Medicare. As described in Item 3 – Legal Proceedings, the United States Department of Justice is investigating Genomic Health’s compliance with the Medicare Date of Service billing regulation.

State Medicaid agencies generally assign a reimbursement rate for our Oncotype DX tests equal to or less than the prevailing Medicare rate, often determined by state law as a percentage of the Medicare reimbursement rate.

International Business Background and Products

Prior to our combination with Genomic Health, we did not have international revenue. We now commercialize our Oncotype DX tests internationally through employees in Canada, Japan and six European countries, as well as through exclusive distribution agreements. We have provided our Oncotype DX tests in more than 90 countries outside of the United States. We do not offer Cologuard outside of the U.S.

Inclusion of our products in guidelines and quality measures will be critical to our international success. The Oncotype DX breast cancer test is recognized in international guidelines issued by the St. Gallen International Breast Cancer Expert Panel and European Society for Medical Oncology. In addition, the National Institute for Health and Care Excellence in England recommends the Oncotype DX breast cancer test for use in clinical practice to guide chemotherapy treatment decisions for certain patients with early-stage, N-, hormone receptor-positive, HER2 negative, invasive breast cancer, as well as certain patients with micrometastases. In June 2019, the German Federal Joint Committee issued a positive reimbursement decision for our Oncotype DX Breast Recurrence Score test following a conclusion by the German Institute for Quality and Efficiency in Health Care that there is sufficient evidence supporting the ability of the test to guide breast cancer adjuvant chemotherapy decisions. Also, each of the Gynecologic Oncology Working Group in Germany and the Japan Breast Cancer Society updated their guidelines to recommend Oncotype DX as the only breast cancer gene expression test to predict chemotherapy benefit in early-stage, hormone receptor-positive invasive breast cancer.

We expect the international sales of our tests will be heavily dependent on the availability of reimbursement. In many countries, governments are primarily responsible for financing and establishing reimbursement for diagnostic tests. The majority of our international Oncotype DX test revenues come from direct payer reimbursement, payments from our distributors, and patient self-pay. We have obtained coverage for our invasive breast cancer test outside of the U.S., including coverage for certain patients in Canada, France, Spain, Germany, Italy, Ireland, Israel, Saudi Arabia, Switzerland, and the United Kingdom. We expect that broadening coverage and reimbursement for our Oncotype DX tests outside of the United States will take years.

Certain countries, such as China, have prohibitions against exporting tissue samples, which will limit our ability to offer our tests in those countries without local laboratories or a method of test delivery that does not require samples to be transported to our U.S. laboratory.

Pipeline Research and Development

Our research and development efforts are focused on developing new products and enhancing existing products to address new cancer areas and expand the clinical utility and addressable patient populations for our existing tests. These development efforts may lead to a variety of possible new products, including risk assessment, screening and prevention, early disease diagnosis, adjuvant and/or neoadjuvant disease treatment, metastatic disease treatment selection and patient monitoring.
Through our collaboration with Mayo Foundation for Medical Education and Research, we have successfully performed validation studies on multiple types of cancer using tissue, blood and other samples. We are currently focusing our research and development efforts on building a pipeline of potential future products and services with a focus on improving Cologuard's performance characteristics and on developing blood or other fluid-based (“liquid biopsy”) tests. We expect to advance liquid biopsy through biomarker discovery and validation in tissue, blood, or other fluids.

Colon Cancer Screening

We are seeking opportunities to improve upon Cologuard’s performance characteristics. For example, we are evaluating whether new biomarkers would increase specificity while maintaining sensitivity. If we could increase the specificity of Cologuard, we believe that would enhance its adoption as a front-line test. We are also evaluating ways that we might make Cologuard even easier for patients to use and opportunities for lowering the cost of providing Cologuard. In October 2019, we and Mayo presented at the American College of Gastroenterology’s 2019 Annual Scientific Meeting findings from a blinded-case control study showing enhanced colorectal cancer and advanced adenoma detection using newly discovered methylation biomarkers and hemoglobin. To establish the performance of the novel multi-target stool DNA test, we recently launched the BLUE-C study, a multi-center, prospective study. We expect to enroll more than 10,000 patients 40 years of age and older in the BLUE-C study. The timing of any such enhancements to Cologuard is unknown and would be subject to FDA approval.

We are also working to develop a blood-based screening test for colorectal cancer.

Hepatocellular Carcinoma (“HCC”) Test Development

We are currently seeking to develop a blood-based biomarker test to serve as an alternative to ultrasound and alpha-fetaprotein (“AFP”) for use in HCC testing. HCC is the most common type of liver cancer. Our goal is to develop a patient-friendly test that performs better than the current standard of care. We are finalizing our HCC test development and plan to make the test available in the second half of 2020.

The ACS estimates that liver cancer would be diagnosed in 43,000 Americans and cause 30,000 deaths in 2020, approximately 90 percent of which would be HCC. Incidence and mortality rates are both increasing at approximately three percent per year. People who have been diagnosed with cirrhosis of the liver or Hepatitis B are at high risk of developing HCC. Evidence shows that HCC testing in these high-risk groups leads to earlier detection and improved outcomes. The NCCN and American Association for the Study of Liver Diseases guidelines recommend that these two groups be tested for HCC every six months using ultrasound and AFP. However, ultrasound and AFP are documented to have poor sensitivity for early stage cancer, which is the primary target of testing.

In November 2019, we released the results of a 443-patient study which demonstrated 80% sensitivity at 90% specificity with a novel combination of six blood-based biomarkers for HCC. The study also showed 71% sensitivity for early stage HCC at 90% specificity. The study compared performance to the AFP test, which demonstrated 45% sensitivity at 90% specificity for early stage HCC. Our HCC test has been granted Breakthrough Device designation by the FDA. The FDA’s Breakthrough Devices program expedites development, assessment, and review processes to provide patients and healthcare providers with timely access to new technologies.

In Vitro Device (“IVD”) Version of Oncotype DX Breast Cancer Test

We believe developing IVD versions of our Oncotype DX products that can be performed locally, rather than in our centralized Redwood City, California, laboratory, may open up additional international opportunities. We are currently developing an IVD version of the Oncotype DX Breast Recurrence Score test and may explore additional IVD versions of our Oncotype DX tests.

Development Studies for Oncotype DX Products

We may also conduct or fund clinical studies that could support additional opportunities for our products. For example, we may explore clinical studies to expand the use of genomic testing to address additional populations, including higher-risk patients.
Our Clinical Laboratory and Manufacturing Facilities

We process our Cologuard test at two state-of-the-art, highly automated lab facilities in Madison, Wisconsin that are certified pursuant to federal Clinical Laboratory Improvement Amendments (“CLIA”) and College of American Pathologists (“CAP”) requirements to process Cologuard tests and provide patient results. Our total lab capacity at both facilities is approximately seven million Cologuard tests per year, with the opportunity to add additional capacity, if needed.

We currently manufacture the Cologuard test in a facility in Madison, Wisconsin. As we expand the commercialization of Cologuard, we believe it will be necessary to expand our manufacturing capacity. Accordingly, we are in the process of building an additional manufacturing facility which we expect to receive FDA approval for commercial production in 2020. We are committed to manufacturing and providing medical devices and related products that meet customer expectations and applicable regulatory requirements. We adhere to manufacturing and safety standards required by federal, state, and local laws and regulations and operate our manufacturing facilities under a quality management system. We purchase certain components for our Cologuard test from third-party suppliers and manufacturers.

All internally developed Oncotype tests for domestic and international patients are currently processed in our clinical reference laboratory facilities in Redwood City, California, which are accredited under CLIA, and certified by CAP. The Oncotype DX AR-V7 Nucleus Detect test, which was designed and validated by Epic Sciences, Inc., is performed in its CLIA-accredited, CAP-certified clinical reference laboratory facility in San Diego, California. Our current clinical laboratory processing capacity in Redwood City is approximately 175,000 tests annually, and we have significant expansion capacity with incremental increases in laboratory personnel and equipment, including expansion capacity for laboratory facilities. We believe that we currently have sufficient capacity to process all of our tests. We have recently completed the construction of an additional laboratory facility on our Redwood City, California campus that will increase capacity for sample processing and research and development. We may require additional facilities in the future as we expand our business and believe that additional space, when needed, will be available on market terms.

Competition

We operate in a rapidly evolving and highly competitive industry. There are a number of private and public companies that offer products or have announced that they are developing products that compete with ours. Some of our current and potential competitors possess greater brand recognition, financial and other resources and development capabilities than us. As more information regarding cancer genomics becomes available to the public, we anticipate that competition will further increase. We expect to compete with a broad range of organizations in the U.S. and other countries that are engaged in the development, production and commercialization of cancer screening and diagnostic products and services. These competitors include:

- biotechnology, diagnostic and other life science companies;
- academic and scientific institutions;
- governmental agencies; and
- public and private research organizations.

The U.S. market for colorectal cancer and pre-cancer screening is large, consisting of nearly 106 million individuals between the ages of 45 and 85, and has attracted numerous competitors. Our Cologuard test faces competition from procedure-based detection technologies such as colonoscopy, flexible sigmoidoscopy, and “virtual” colonoscopy, a radiological imaging approach that visualizes the inside of the bowel by CT scan (spiral computerized axial tomography), as well as other common screening tests, such as the fecal occult blood test and the fecal immunochemical test (“FIT”), and newer screening technologies. Newer screening technologies include liquid biopsy tests, such as Epi proColon, approved by the FDA in April 2016, and pill-based imaging solutions like PillCam COLON, cleared by the FDA in February 2014, and C-Scan, which obtained a CE Mark in early 2019.
In addition, some companies and institutions are developing liquid biopsy tests based on the detection of proteins, tumor cells, nucleic acids, epigenetic markers, or other biomarkers in the blood. These tests could represent significant competition for Cologuard or other tests we may develop. We are aware of a number of companies—including Bioprogns, Cambridge Epigenetics Limited, CellMax, Inc., DiaCarta, EDP Biotech Corporation, Epigenomics AG, Freenome Inc., Genomictree, GlycoTec, GRAIL, Inc., Guardant Health, Inc., Immunovia AB, Laboratory for Advanced Medicine, Natera Inc., Nucleix Ltd., Thrive Inc., Singlera Genomics, and Volition Diagnostics — that have developed, or are developing, liquid biopsy tests for the detection of cancer. Guardant Health, Inc. has begun enrolling patients in a prospective colorectal cancer screening clinical trial intended to support FDA approval, and other companies, including Freenome Inc., are likely to do so in the future.

We are also aware of at least three companies, DiaTech Pharmacogenetics, Prescient Metabiotics, and Genescope, that are seeking to develop stool-based colorectal cancer tests in the United States. Our competitors may also be developing additional methods of detecting colorectal cancer and pre-cancer that have not yet been announced.

Notwithstanding that the market for colorectal cancer screening is highly competitive, we believe that Cologuard, as the first and only sDNA-based non-invasive colorectal cancer screening test on the market today, compares favorably to other available products and services. All other colorectal cancer detection methods in use today are constrained by some combination of poor sensitivity, poor adherence, and high cost. For example, colonoscopy requires advance dietary restrictions and bowel cleansing and can be uncomfortable, time-consuming, hazardous, and expensive. Colonoscopy requires sedation, potential lost time from work, and someone to drive the patient home from the procedure. A 2010 study shows that 7 out of 10 people age 50 and older who were told they should get a colonoscopy did not do so primarily due to fears. Fecal blood testing, including FIT testing, suffers from poor sensitivity, with only a 74 percent detection rate for cancer and 24 percent detection rate for pre-cancer. The blood-based DNA tests currently available are also disadvantaged by relatively low sensitivity. Epigenomics AG has reported that the Epi proColon test has an overall cancer sensitivity rate of 68 percent, and only 59 percent for early-stage cancer. Additionally, FIT testing suffers from low adherence over time. One study published in the American Journal of Managed Care demonstrated that only 3 out of every 1,000 patients studied adhered to fecal test screening guidelines during a continuous 10-year observation period.

Our Oncotype DX products compete against a number of companies that offer products or have conducted research to profile genes and gene expression in breast, colon and prostate cancer. These companies include Agendia Inc., BioTheranostics, GenomeDX Biosciences Inc., Guardant Health, Inc., Hologic Inc., Myriad Genetics Inc. (and its Sividon Diagnostics subsidiary), Pacific Edge Limited, NanoString Technologies Inc., NeoGenomics, Inc., OPKO Health, Inc. (and its Bio-Reference Laboratories, Inc. subsidiary), Qiagen N.V. and Veracyte, Inc. Historically, our principal competition for our Oncotype DX tests has also come from existing diagnostic methods used by pathologists and oncologists, and such traditional diagnostic methods can be difficult to change or supplement. Our Oncotype DX tests also face competition from commercial laboratories with strong distribution networks for diagnostic tests, such as Laboratory Corporation of America Holdings and Quest Diagnostics Incorporated. Other potential competitors include companies that develop diagnostic tests such as Roche Diagnostics, a division of Roche Holding, Ltd, and Siemens AG, as well as other companies and academic and research institutions.

For our prostate cancer tests, we face comparatively greater competition than for our breast cancer test, including competition from products which were on the market prior to our product launch and which are supported by clinical studies and published data. This existing direct and indirect competition for tests and procedures may make it difficult to gain market share, impact our ability to obtain reimbursement or result in a substantial increase in resources necessary for us to successfully continue to commercialize our Oncotype DX GPS prostate test and the Oncotype DX AR-V7 Nucleus Detect test.

We believe that our Oncotype DX tests compete primarily on the basis of the value of the quantitative information our tests provide; the clinical validation of the utility of our tests; the level of adoption and reimbursement coverage for our tests; the inclusion of our tests in clinical practice guidelines; our ability to commercialize products through our clinical development platform; our ability to expand our sales efforts into new areas of medical practice as we launch new products; our collaborations with clinical study groups; the quality of our clinical laboratory; and the level of customer service we provide. While we believe that our Oncotype DX tests compete favorably with respect to these factors, in order to continue to do so we must continue to innovate and adopt advanced technology; successfully market, sell and enhance our tests; obtain peer-reviewed publications of our clinical studies in a timely manner; continue to obtain positive reimbursement determinations; continue to expand in countries outside of the U.S.; continue to develop our technological and clinical operations; encourage healthcare provider participation in Medicare-required information collection efforts; and successfully expand our reach into additional product markets including through collaborations with third parties.
We have changed the list price of our Oncotype DX tests in the past, and we expect to change prices for our tests in the future. Any increase or decrease in pricing could impact reimbursement of and demand for our tests. Others may develop lower priced tests that could be viewed by healthcare providers and payers as functionally equivalent to our tests, or offer tests at prices designed to promote market penetration, which could force us to lower the list prices of our tests and impact our operating margins and our ability to achieve sustained profitability. Additionally, our Oncotype DX tests are currently marketed as LDTs, and we may bring future products to market as LDTs. Some competitors have developed tests cleared or approved for marketing by the FDA. There may be a marketing differentiation or perception that an FDA cleared or approved test is more desirable than LDTs, and that may discourage adoption of and reimbursement for our Oncotype DX tests.

We are aware of at least 5 companies that are developing or have developed liquid biopsy-based liver cancer screening or diagnostic tests – Laboratory for Advanced Medicine, JBS Science, EarlyDx, Glycotest and Epigenomics. Epigenomics recently received a CE mark for their HCCBloodTest.

Competitors may develop their own versions of our tests in countries where we did not apply for patents, where our patents have not issued or where our intellectual property rights are not recognized and compete with us in those countries, including encouraging the use of their test by healthcare providers or patients in other countries.

We may be unable to compete effectively against our competitors either because their products and services are superior or because they may have more expertise, experience, financial resources, or stronger business relationships. These competitors may have broader product lines and greater name recognition than we do. Furthermore, even if we do develop new marketable products or services, our current and future competitors may develop products and services that are more commercially attractive than ours, and they may bring those products and services to market earlier or more effectively than us. If we are unable to compete successfully against current or future competitors, we may be unable to increase market acceptance for and sales of our tests, which could prevent us from increasing or sustaining our revenues or achieving sustained profitability and could cause the market price of our common stock to decline.

Research and Development

Research and development, which includes our clinical study programs, accounts for a material portion of our operating expenses. As we seek to enhance our current product portfolio and expand our product pipeline by developing additional cancer screening and diagnostic tests, we expect that our research and development expenditures will continue to increase.

Seasonality

We are continuing to learn how seasonal factors may affect our business. Based on our experience to date, we expect some seasonal variations in our financial results due to a variety of factors, such as the year-end holiday period and other major holidays, vacation patterns of both patients and healthcare providers, climate and weather conditions in our markets, seasonal conditions that may affect medical practices and provider activity, including for example influenza outbreaks that may reduce the percentage of patients that can be seen, and other factors relating to the timing of patient deductibles and co-insurance limits.

Regulation

Certain of our activities are subject to regulatory oversight by the FDA under provisions of the Federal Food, Drug, and Cosmetic Act (“FDCA”) and regulations thereunder, including regulations governing the development, marketing, labeling, promotion, manufacturing, distribution, and export of diagnostic products. Our clinical laboratory facilities are subject to oversight by CMS pursuant to CLIA, as well as agencies in various states, including New York. We are subject to many other federal, state and foreign laws, including anti-fraud and abuse, anti-kickback and patient privacy. Failure to comply with applicable requirements can lead to sanctions, including withdrawal of products from the market, recalls, refusal to authorize government contracts, product seizures, exclusion from participation in federal and state healthcare programs, civil money penalties, injunctions, and criminal prosecution.
U.S. Food and Drug Administration

The FDA granted premarket approval ("PMA") for Cologuard in August 2014. Devices subject to FDA regulation must undergo premarket review prior to commercialization unless the device is exempt from such review. The regulations governing Cologuard’s approval place substantial restrictions on how Cologuard is marketed and sold, specifically, by prescription only. In addition, as a condition of our FDA approval, we are required to conduct a post-approval study. A final report on this study is due to the FDA in 2020. There can be no assurance that the results of this study will be satisfactory and will not cause the FDA to modify or withdraw our approval for Cologuard.

Additionally, manufacturers of medical devices must comply with various regulatory requirements under the FDCA and regulations thereunder, including, but not limited to, quality system regulations, unless they are exempt, facility registration, product listing, labeling requirements, and certain post-market surveillance requirements. Entities that fail to comply with FDA requirements can be liable for criminal or civil penalties, such as recalls, detentions, orders to cease manufacturing, and restrictions on labeling and promotion, among other potential sanctions. In 2017, we recalled one of the components of our Cologuard test kit and circumstances may arise that cause us to recall other products or components used in connection with our Cologuard test.

We may develop new diagnostic products and services that are regulated by the FDA as medical devices. The regulatory review and approval process for medical devices can be costly, timely, and uncertain. This process may involve, among other things, successfully completing additional clinical trials and submitting a premarket clearance notice or filing a premarket approval application with the FDA. If premarket review is required by the FDA, there can be no assurance that our tests will be cleared or approved on a timely basis, if at all. In addition, there can be no assurance that the labeling claims cleared or approved by the FDA will be consistent with our current claims or adequate to support continued adoption of and reimbursement for our products. Ongoing compliance with FDA regulations could increase the cost of conducting our business, subject us to FDA inspections and other regulatory actions, and potentially subject us to penalties in the event we fail to comply with such requirements.

Laboratory Developed Tests ("LDTs")

Our Oncotype DX tests are regulated as LDTs and we may develop additional LDTs. LDTs are clinical laboratory tests that are developed and validated by a laboratory for its own use. Historically, LDTs have been regulated under CLIA while the FDA has exercised enforcement discretion and not required approvals or clearances for many LDTs performed by CLIA-certified laboratories. The FDA has traditionally chosen not to exercise its authority to regulate LDTs because LDTs were limited in number, were relatively simple tests, and were typically used to diagnose rare disease and uncommon conditions.

At various times since 2006, the FDA has issued documents outlining its intent to require varying levels of FDA oversight of many LDTs, including our tests. FDA has yet to implement any form of oversight requirements with respect to LDTs, and it is unclear at this time if or when the FDA ends enforcement discretion for LDTs. It is also unclear whether the FDA may decide to regulate certain LDTs on a case-by-case basis at any time. Action by the FDA to exercise enforcement discretion over LDTs, may materially impact our development and commercialization of LDTs, including without limitation our Oncotype tests.

Laboratory Certification, Accreditation and Licensing

We are also subject to U.S. and state laws and regulations regarding the operation of clinical laboratories. CLIA requirements and laws of certain states, including those of California, New York, Maryland, Pennsylvania, Rhode Island and Florida, impose certification requirements for clinical laboratories, and establish standards for quality assurance and quality control, among other things. CLIA provides that a state may adopt different or more stringent regulations than federal law and permits states to apply for exemption from CLIA if the state’s laboratory laws are equivalent to, or more stringent than, CLIA. For example, the State of New York's clinical laboratory regulations, which have received an exemption from CLIA, contain provisions that are in certain respects more stringent than federal law. Therefore, as long as New York maintains a licensure program that is CLIA-exempt, we will need to comply with New York’s clinical laboratory regulations in order to offer our clinical laboratory products and services in New York.
We have current certificates to perform clinical laboratory testing. Clinical laboratories are subject to inspection by regulators and to sanctions for failing to comply with applicable requirements. Sanctions available under CLIA and certain state laws include prohibiting a laboratory from running tests, requiring a laboratory to implement a corrective plan, and imposing civil monetary penalties. If we fail to meet any applicable requirements of CLIA or state law, that failure could adversely affect any future CMS consideration of our technologies, prevent their approval entirely, and/or interrupt the commercial sale of any products and services and otherwise cause us to incur significant expense.

**HIPAA and Other Privacy Laws**

The Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act (“HIPAA”) established comprehensive protection for the privacy and security of health information. The HIPAA standards apply to three types of organizations, or “Covered Entities”: health plans, healthcare clearinghouses, and healthcare providers that conduct certain healthcare transactions electronically. Covered Entities and their business associates must have in place administrative, physical, and technical standards to guard against the misuse of individually identifiable health information. We perform activities that may implicate HIPAA, such as providing clinical laboratory testing services and entering into specific kinds of relationships with Covered Entities and business associates of Covered Entities. Penalties for violations of HIPAA include civil money and criminal penalties.

Our activities must also comply with other applicable privacy laws, which impose restrictions on the access, use and disclosure of personal information. More state and international privacy laws are being adopted. Many state laws are not preempted by HIPAA because they are more stringent or are broader in scope than HIPAA. Beginning in 2020 we will also need to comply with the California Consumer Privacy Act of 2018, which protects personal information other than health information covered by HIPAA and allows certain data access and erasure rights to California consumers. Further, we are required to comply with international personal data protection laws and regulations, including the European Union's General Data Protection Regulation (“GDPR”). The GDPR is a prescriptive, detailed and punitive regulation. While companies are afforded some flexibility in determining how to comply with the GDPR’s various requirements, GDPR has and will continue to require significant effort and expense to ensure continuing compliance. All of these laws may impact our business and may change periodically, which could have an effect on our business operations if compliance becomes substantially costlier than under current requirements. Our failure to comply with these privacy laws or significant changes in the laws restricting our ability to obtain stool, tissue, blood and other patient samples and associated patient information could significantly impact our business and our future business plans.

**Federal and State Billing and Fraud and Abuse Laws**

**Antifraud Laws/Overpayments.** We are subject to numerous federal and state antifraud and abuse laws, including the Federal False Claims Act. Many of these antifraud laws are broad in scope, and neither the courts nor government agencies have extensively interpreted these laws. Prohibitions under some of these laws include:

- the submission of false claims or false information to government programs;
- the retention of any overpayments by governmental payers;
- deceptive or fraudulent conduct;
- excessive or unnecessary services or services at excessive prices; and
- defrauding private sector health insurers.

We may be subject to substantial penalties for violations of anti-fraud and abuse laws, including denial of payment and refunds or recoupments, suspension of payments from Medicare, Medicaid or other federal healthcare programs, and exclusion from participation in federal and state healthcare programs, as well as civil monetary and criminal penalties and imprisonment. Numerous federal and state agencies enforce the antifraud and abuse laws. In addition, private insurers may also bring private actions. In some circumstances, private whistleblowers are authorized to bring fraud suits on behalf of the government against providers and are entitled to receive a portion of any final recovery.
In addition, amendments to the False Claims Act impose severe penalties for the knowing and improper retention of overpayments collected from governmental payers. Within 60 days of identifying and quantifying an overpayment, a provider is required to notify CMS or the Medicare contractor of the overpayment and the reason for it and return the overpayment. These amendments could subject our procedures for identifying and processing payments to greater scrutiny. Overpayments may occur from time to time in the healthcare industry without any fraudulent intent. For example, overpayments may result from mistakes in reimbursement claim forms or from improper processing by governmental payers. We maintain protocols intended to identify any overpayments. From time to time we may identify overpayments and be required to refund those amounts to government payers.

To avoid liability, we must carefully and accurately code claims for reimbursement, proactively monitor the accuracy and appropriateness of Medicare claims and payments received, diligently investigate any credible information indicating that we may have received an overpayment, and promptly return any overpayments.

**Federal and State “Self-Referral” and “Anti-Kickback” Restrictions**

If we or our operations are found to be in violation of applicable laws and regulations prohibiting improper referrals for healthcare services or products, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in U.S. federal or state healthcare programs, and the curtailment or restructuring of our operations.

**Anti-Kickback Statute.** The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce either the referral of an individual, or the furnishing, recommending, or arranging for a good or service, for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs, unless an exception applies. The term “remuneration” is not defined in the federal Anti-Kickback Statute and has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payment, ownership interests and providing anything at less than its fair market value. Sanctions for violations of the federal Anti-Kickback Statute may include imprisonment and other criminal penalties, civil monetary penalties and exclusion from participation in federal healthcare programs. Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs, and do not contain identical safe harbors.

In addition to the Anti-Kickback Statute, in October 2018, Congress enacted the Eliminating Kickbacks in Recovery Act of 2018 (“EKRA”) as a component of the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act. EKRA is an anti-kickback law similar to the federal Anti-Kickback Statute that, subject to several exceptions, makes it a criminal offense to pay any remuneration to induce referrals to, or in exchange for, patients using the services of a recovery home, a substance use clinical treatment facility, or laboratory. Although it appears that EKRA was intended to reach patient brokering and similar arrangements to induce patronage of substance use recovery and treatment, the language in EKRA is broadly written, and unlike the federal Anti-Kickback Statute, applies to laboratory services covered under any public or private payer arrangement. That said, an interpretation of EKRA that prohibits certain incentive compensation payments to sales employees or other forms of remuneration that would otherwise be permissible under a safe harbor to the federal Anti-Kickback Statute would directly conflict with the intent of the federal Anti-Kickback Statute and regulations, and would prohibit a number of practices that are common throughout the industry. Significantly, EKRA permits the U.S. Department of Justice to issue regulations clarifying EKRA’s exceptions or adding additional exceptions, but no such regulations or applicable guidance have yet been issued.

**Self-Referral Law.** The federal “self-referral” law, commonly referred to as the “Stark” law, provides that healthcare providers who, personally or through a family member, have ownership interests in or compensation arrangements with a laboratory are prohibited from making a referral to that laboratory for laboratory tests reimbursable by Medicare, and also prohibits laboratories from submitting a claim for Medicare payments for laboratory tests referred by healthcare providers who, personally or through a family member, have ownership interests in or compensation arrangements with the testing laboratory. The Stark law contains a number of specific exceptions which, if met, permit healthcare providers who have ownership or compensation arrangements with a testing laboratory to make referrals to that laboratory and permit the laboratory to submit claims for Medicare payments for laboratory tests performed pursuant to such referrals. We are subject to comparable state laws, some of which apply to all payers regardless of source of payment, and do not contain identical exceptions to the Stark law.
Any action against us for violation of these or similar foreign laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management’s attention from the operation of our business.

**Sunshine Act**

In 2010, Congress enacted a statute commonly known as the Sunshine Act, which aims to promote transparency. The Sunshine Act requires manufacturers of drugs, devices, biologicals and medical supplies covered by Medicare, Medicaid or the Children’s Health Insurance Program to report annually to CMS any payments or other transfers of value made to healthcare providers and teaching hospitals, unless an exception applies. Manufacturers must also disclose to CMS any healthcare provider ownership or investment interests. Some states have similar transparency laws. Our failure to comply with any applicable transparency reporting requirements may subject us to substantial penalties.

**International**

When marketing our tests outside of the U.S., we are subject to foreign regulatory requirements governing human clinical testing, export of tissue, marketing approval for our products and performance and reporting of tests on a local basis. These requirements vary by jurisdiction, differ from those in the U.S. and may require us to perform additional pre-clinical or clinical testing. In many countries outside of the U.S., coverage, pricing and reimbursement approvals are also required in order for our tests to be made available to patients.

We are developing an IVD version of the Oncotype DX Breast Recurrence Score test. We may commercialize this IVD diagnostic product in Europe, which would subject us to European Union (“EU”) medical device oversight. Accordingly, we and certain of our contract manufacturers would be subject to ongoing compliance with various International Organization for Standardization (“ISO”) standards and ongoing regulatory oversight and review. These include routine inspections by EU Notified Bodies, which are entities accredited by an EU Member State to assess whether a product to be placed on the market meets certain preordained standards, of our manufacturing facilities and our records for compliance with requirements such as ISO 13485 and ISO 27001, which establish extensive requirements for quality assurance and control as well as manufacturing and change control procedures. Additionally, the EU adopted the IVD Directive Regulation (“IVDR”) which will increase the regulatory requirements applicable to IVDs in the EU and would require that we classify and obtain pre-approval for any diagnostic products, including an IVD version of the Oncotype DX Breast Recurrence Score test, which would be subject to the IVDR as of May 25, 2022. If we are not able to maintain regulatory compliance, we may not be permitted to market our diagnostic products and/or may be subject to enforcement by EU Competent Authorities, bodies with authority to act on behalf of the government of the applicable EU Member State to ensure that the requirements of the directive or regulation are met.

Many countries in which we offer our tests have anti-kickback regulations prohibiting providers from offering, paying, soliciting or receiving remuneration, directly or indirectly, in order to induce business that is reimbursable under any national healthcare program. In situations involving healthcare providers employed by state-funded institutions or national healthcare agencies, violation of the local anti-kickback law may also constitute a violation of the U.S. Foreign Corrupt Practices Act (“FCPA”).

The FCPA prohibits any U.S. individual, business entity or employee of a U.S. business entity from offering or providing, directly or through a third party, including the distributors we rely on in certain markets, anything of value to a foreign government official with corrupt intent to influence an award or continuation of business or to gain an unfair advantage, whether or not such conduct violates local laws. In addition, it is illegal for a company that reports to the Securities and Exchange Commission (“SEC”) to have false or inaccurate books or records or to fail to maintain a system of internal accounting controls. We are also required to maintain accurate information and control over sales and distributors’ activities that may fall within the purview of the FCPA, its books and records provisions and its anti-bribery provisions.

**Other Laws**

**Occupational Safety and Health.** In addition to its comprehensive regulation of health and safety in the workplace in general, the Occupational Safety and Health Administration has established extensive requirements aimed specifically at laboratories and other healthcare-related facilities. In addition, because our operations require employees to use certain hazardous chemicals, we also must comply with regulations on hazard communication and hazardous chemicals in laboratories. These regulations require us, among other things, to develop written programs and plans, which must address methods for preventing and mitigating employee exposure, the use of personal protective equipment, and training.
Specimen Transportation. Our commercialization activities for Cologuard subject us to regulations of the Department of Transportation, the U.S. Postal Service, and the Centers for Disease Control and Prevention that apply to the surface and air transportation of clinical laboratory specimens.

Environmental. The cost of compliance with federal, state and local provisions related to the protection of the environment has had no material effect on our business. There were no material capital expenditures for environmental control facilities in the year ended December 31, 2019, and there are no material expenditures planned for such purposes for the year ended December 31, 2020.

Intellectual Property

We rely on a combination of patents, patent applications, copyrights and trademarks, as well as contracts, such as confidentiality, material data transfer, license and invention assignment agreements, to protect our intellectual property rights. We also rely upon trade secret laws to protect unpatented know-how and continuing technological innovation.

We have intellectual property rights pertaining to sample type, sample preparation, sample preservation, biomarkers, gene expression and sequencing technology, and related methods and formulations.

Our success depends to a significant degree upon our ability to protect our technologies through patent coverage. As of December 31, 2019, we had 110 issued patents in the U.S. and 595 issued patents outside of the U.S., which includes validated patents issued by the European Patent Office in key European Union countries, covering genes and methods that are components of the Cologuard test, Oncotype DX breast, colon and prostate cancer tests, pipeline technologies or research methods and platform technologies. In addition, we have a number of pending patent applications in the U.S. and in other countries, including provisional and non-provisional filings. Our issued U.S. patents expire at various times between 2020 and 2037. Some of these U.S. patent applications also have corresponding pending or granted applications under the Patent Cooperation Treaty in Canada, Europe, Japan, Australia and other jurisdictions. In these patent applications, we have either sole or joint ownership positions. In certain cases where joint ownership positions were created, we have negotiated contractual provisions providing us with the opportunity to acquire exclusive rights under the patent applications. Under some patent applications, we have elected to allow exclusive options to lapse without exercising the option. The joint ownership agreements generally are in the form of material data transfer agreements that were executed at the onset of our collaborations with third parties.

License Agreements

We license certain technologies that are, or may be, incorporated into our technology under several license agreements. Generally, the license agreements require us to pay royalties based on certain net revenues received, and may require minimum royalty amounts, milestone payments, and maintenance fees.

Mayo

In June 2009, we entered into a license agreement with Mayo Foundation for Medical Education and Research (“Mayo”). Our license agreement with Mayo was amended and restated in February 2015 and further amended in January 2016, October 2017, and in January 2019. Under the license agreement, Mayo granted us an exclusive, worldwide license to certain Mayo patents and patent applications, as well as a non-exclusive, worldwide license with regard to certain Mayo know-how. The scope of the license covers any screening, surveillance or diagnostic test or tool for use in connection with any type of cancer, pre-cancer, disease or condition.

The licensed Mayo patents and patent applications contain both method and composition claims that relate to sample processing, analytical testing, and data analysis associated with nucleic acid screening for cancers and other diseases. The jurisdictions covered by these patents and patent applications include the U.S., Australia, Canada, the European Union, China, Japan, and Korea. Under the license agreement, we assumed the obligation and expense of prosecuting and maintaining the licensed Mayo patents and are obligated to make commercially reasonable efforts to bring to market products using the licensed Mayo intellectual property.
Pursuant to our license agreement with Mayo, we are required to pay Mayo a low single-digit royalty on our net sales of products using the licensed Mayo intellectual property each year during the term of the Mayo agreement. The January 2016 amendment to the Mayo license agreement established various low single-digit royalty rates on net sales of current and future products and clarified how net sales will be calculated. As part of the January 2016 and October 2017 amendments, the royalty rate on our net sales of Cologuard increased, but the rate remains a low single-digit percentage of net sales.

In addition to the royalties described above, we are also required to pay Mayo cash of $0.2 million, $0.8 million and $2.0 million upon each product using the licensed Mayo intellectual property reaching $5.0 million, $20.0 million and $50.0 million in cumulative net sales, respectively.

As part of the February 2015 amendment and restatement of the license agreement, we agreed to pay Mayo an additional $5.0 million, payable in five annual installments, through 2019.

The license agreement will remain in effect, unless earlier terminated by the parties in accordance with the agreement, until the last of the licensed patents expires in 2037 (or later, if certain licensed patent applications are issued). However, if we are still using the licensed Mayo know-how or certain Mayo-provided biological specimens or their derivatives on such expiration date, the term shall continue until the earlier of the date we stop using such know-how and materials and the date that is five years after the last licensed patent expires. The license agreement contains customary termination provisions and permits Mayo to terminate the license agreement if we sue Mayo or its affiliates, other than any such suit claiming an uncured material breach by Mayo of the license agreement.

In addition to granting us a license to the covered Mayo intellectual property, Mayo provides us with product development and research and development assistance pursuant to the license agreement and other collaborative arrangements. Certain of Mayo's obligations to provide development assistance expired in January 2020. We and Mayo are in discussions to amend the license agreement to extend that date.

Hologic

In October 2009, we entered into a technology license agreement with Hologic, Inc. ("Hologic"). Under the license agreement, Hologic granted us an exclusive, worldwide license within the field of human stool based colorectal cancer and pre-cancer detection or identification with regard to certain Hologic patents, patent applications and improvements, including Hologic’s Invader detection chemistry (the “Covered Hologic IP”). The licensed patents and patent applications contain both method and composition-of-matter claims. The jurisdictions covered by these patents and patent applications include the U.S., Australia, Canada, China, the European Union, Japan, and Korea. The license agreement also provided us with non-exclusive, worldwide licenses to the Covered Hologic IP within a field covering clinical diagnostic purposes relating to colorectal cancer (including cancer diagnosis, treatment, monitoring or staging) and the field of detection or identification of colorectal cancer and pre-cancers through means other than human stool samples. In December 2012, we entered into an amendment to this license agreement with Hologic pursuant to which Hologic granted us a non-exclusive worldwide license to the Covered Hologic IP within the field of any disease or condition within, related to or affecting the gastrointestinal tract and/or appended mucosal surfaces.

We are required to pay Hologic a low single-digit royalty on our net sales of products using the Covered Hologic IP.

Unless earlier terminated in accordance with the agreement, the license agreement will remain in effect until the last of the licensed patents expires in 2029. The agreement contains customary termination provisions which, among other things, permit termination in the event of material uncured breaches.
**Biocartis**

In September 2017, Genomic Health (now a wholly owned subsidiary) entered into an exclusive license and development agreement with Biocartis N.V., (“Biocartis”) a molecular diagnostics company based in Belgium, to develop and commercialize an in vitro diagnostic, or IVD, version of the Oncotype DX Breast Recurrence Score test on Biocartis' Idylla platform. Biocartis’ proprietary Idylla platform could enable local pathology labs to generate Oncotype DX Breast Recurrence Score results. Under the terms of the license and development agreement, we have an exclusive, worldwide, royalty-bearing, license to develop and commercialize an IVD version of our Oncotype DX Breast Recurrence Score test on Biocartis’ Idylla platform, and an option to expand the collaboration to include additional tests in oncology and urology. Under a November 2018 addendum to the license and development agreement, we exercised our option to expand the collaboration to include tests in urology and obtained a right of first refusal to add a test for the non-invasive detection of prostate cancer in a pre-biopsy setting. We have primary responsibility for developing, validating and registering the IVD version of our Oncotype DX Breast Recurrence Score test and any future test that would be based on the Idylla platform, and are also responsible for manufacturing and commercialization activities with respect to such tests.

**Acquisitions**

In November 2019, we completed the combination with Genomic Health, Inc., a leading provider of genomic-based diagnostic tests that help to optimize cancer care. As part of the combination, we acquired all of the outstanding equity interest of the company for an aggregate purchase price of $2.5 billion through a combination of cash and equity.

**Employees**

As of December 31, 2019, we had 4,110 full-time employees. None of our employees are represented by a labor union. We consider our relationship with our employees generally to be good.

**Financial Information**

See our consolidated financial statements included elsewhere in this Form 10-K and accompanying notes to the consolidated financial statements.

**Available Information**

We were incorporated in the State of Delaware on February 10, 1995. Our corporate headquarters are located at 441 Charmany Drive, Madison, Wisconsin 53719. Our telephone number is 608-284-5700. Our Internet website address is www.exactsciences.com. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, including exhibits, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 are available free of charge through the investor relations page of our Internet website as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission. Our Internet website and the information contained therein or connected thereto are not intended to be incorporated into this Annual Report on Form 10-K.

**Item 1A. Risk Factors**

We operate in a rapidly changing environment that involves a number of risks, some of which are beyond our control. This discussion highlights some of the risks that may affect future operating results. These are the risks and uncertainties we believe are most important for you to consider. We cannot be certain that we will successfully address these risks. If we are unable to address these risks, our business may not grow, our stock price may suffer, and we may be unable to stay in business. Additional risks and uncertainties not presently known to us, which we currently deem immaterial or which are similar to those faced by other companies in our industry or business in general, may also impair our business operations.
We may never become profitable.

We have incurred losses since we were formed. From our date of inception on February 10, 1995 through December 31, 2019, we have accumulated a total deficit of approximately $1.1 billion. We expect to continue investing significantly toward development and commercialization of our colorectal cancer screening technology, our Oncotype DX tests and other products and services. If our revenue does not grow significantly, we will not be profitable. We cannot be certain that the revenue from the sale of any products or services based on our technologies will be sufficient to make us profitable.

We may need additional capital to execute our business plan.

Although we believe that we have sufficient capital to fund our operations for at least the next twelve months, we may require additional capital to fully fund our current strategic plan, which includes successfully commercializing our Cologuard and Oncotype DX tests and developing a pipeline of future products and services. Additional financing may not be available in amounts or on terms satisfactory to us or at all. Our success in raising additional capital may be significantly affected by general market conditions, the market price of our common stock, our financial condition, uncertainty about the future commercial success of our current products and services, the development and commercial success of future products or services, regulatory developments, the status and scope of our intellectual property, any ongoing litigation, our compliance with applicable laws and regulations and other factors. If we raise additional funds through the sale of equity, convertible debt or other equity-linked securities, our stockholders’ ownership will be diluted, and the market price of our common stock could be depressed. We may issue securities that have rights, preferences and privileges senior to our common stock. If we raise additional funds through collaborations, licensing arrangements or other structured financing transactions, we may relinquish rights to our technologies or products or services, grant security interests in our assets or grant licenses to third parties on terms that are unfavorable to us.

Our success depends heavily on our Cologuard colorectal cancer screening test and our Oncotype DX breast cancer test.

For at least the next 12 months, our ability to generate revenues will depend very substantially on the commercial success of our Cologuard and Oncotype DX breast cancer tests. There can be no assurance that we will develop or commercialize any other products or services that will generate significant revenue. The commercial success of our tests and our ability to generate revenues will depend on a variety of factors, including the following:

- acceptance in the medical community;
- inclusion in healthcare guidelines and recommendations, such as those developed by ACS, USPSTF, ASCO, and NCCN and similar guidelines and recommendations outside the United States;
- inclusion in quality measures including the HEDIS measures and the CMS Medicare Advantage Star Ratings;
- recommendations and studies that may be published by government agencies, companies, professional organizations, academic or medical journals or other key opinion leaders;
- patient acceptance and demand;
- patient compliance with orders for our tests by healthcare providers, and patient adherence to recommendations regarding periodic re-testing;
- successful sales, marketing, and educational programs, including successful direct-to-patient marketing such as television advertising and social media;
- the number of patients screened for colorectal cancer, as well as the number of patients who use Cologuard for that purpose;
- number of women diagnosed with breast cancer;
- sufficient coverage and reimbursement by third-party payers within and outside the U.S.
- the existence of federal or state laws that mandate coverage for colorectal cancer screening, the extent to which those laws mandate coverage of Cologuard and the enforcement of those laws;
- the amount and nature of competition from other products and procedures;
- maintaining regulatory approvals to legally market;
- the ease of use of our ordering process for healthcare providers;
- maintaining and defending patent protection for the intellectual property relevant to our products and services; and
- our ability to establish and maintain adequate commercial manufacturing, distribution, sales and CLIA laboratory testing capabilities.
If we are unable to continue to grow sales of our Cologuard and Oncotype DX breast cancer tests or if we are delayed or limited in doing so, our business prospects, financial condition and results of operations would be adversely affected.

**Our operating results could be subject to significant fluctuation, which could increase the volatility of our stock price and cause losses to our stockholders.**

Our revenues and results of operations may fluctuate significantly, depending on a variety of factors, including the following:

- our success in marketing and selling, and changes in demand for, our Cologuard and Oncotype DX tests, and the level of reimbursement and collection obtained for such tests;
- seasonal variations affecting healthcare provider recommendations for our tests and patient compliance with healthcare provider recommendations, including without limitation holidays, weather events, and circumstances such as the outbreak of influenza that may limit patient access to medical practices for diagnostic tests and preventive services;
- our success in collecting payments from third-party payers, patients and collaborative partners, variation in the timing of these payments and recognition of these payments as revenues;
- the pricing of our tests, including potential changes in CMS or other reimbursement rates;
- circumstances affecting our ability to provide our tests, including weather events, supply shortages, or regulatory or other circumstances that adversely affect our ability to manufacture our tests or process tests in our clinical laboratories;
- fluctuations in the amount and timing of our selling and marketing costs and our ability to manage costs and expenses and effectively implement our business; and
- our research and development activities, including the timing of costly clinical trials.

**Other companies or institutions may develop and market novel or improved technologies, which may make our technologies less competitive or obsolete.**

We operate in a rapidly evolving and highly competitive industry. There are a number of private and public companies that offer products or have announced that they are developing products that compete, or may one day compete, with ours. Some of our current and potential competitors possess greater brand recognition, financial and other resources and development capabilities than us. As more information regarding cancer genomics becomes available to the public, we anticipate that competition will further increase. We expect to compete with a broad range of organizations in the U.S. and other countries that are engaged in the development, production and commercialization of cancer screening and diagnostic products and services. These competitors include:

- biotechnology, diagnostic and other life science companies;
- academic and scientific institutions;
- governmental agencies; and
- public and private research organizations.

The U.S. market for colorectal cancer and pre-cancer screening is large, consisting of nearly 106 million individuals between the ages of 45 and 85, and has attracted numerous competitors. Our Cologuard test faces competition from procedure-based detection technologies such as colonoscopy, flexible sigmoidoscopy, and “virtual” colonoscopy, a radiological imaging approach that visualizes the inside of the bowel by CT scan (spiral computerized axial tomography), as well as other common screening tests, such as the fecal occult blood test and the fecal immunochemical test, and newer screening technologies. Newer screening technologies include liquid biopsy tests, such as Epi proColon, approved by the FDA in April 2016, and pill-based imaging solutions like PillCam COLON, cleared by the FDA in February 2014.

In addition, some companies and institutions are developing liquid biopsy tests based on the detection of proteins, tumor cells, nucleic acids, epigenetic markers, or other biomarkers in the blood. These tests could represent significant competition for Cologuard or other tests we may develop, including our HCC test. We are aware of a number of companies—including Bioprogns, Cambridge Epigenetix Limited, CellMax, Inc., DiaCarta, EDP Biotech Corporation, Epigenomics AG, Freenome Inc., Genomictree, Glycotest, GRAIL, Inc., Guardant Health, Inc., Immunovia AB, Laboratory for Advanced Medicine, Natera Inc., Nucleix Ltd., Thrive, Inc., Singlera Genomics, and Volition Diagnostics—that have developed, or are developing, liquid biopsy tests for the detection of cancer. Guardant Health, Inc. has begun enrolling patients in a prospective clinical trial intended to support FDA approval, and other companies, including Freenome Inc., are likely to do so in the future.
We are aware of at least three companies, DiaTech Pharmacogenetics, Prescient Metabiomics, and Geneoscopy, that are seeking to develop stool-based colorectal cancer tests in the U.S. Our competitors may also be developing additional methods of detecting colorectal cancer and pre-cancer that have not yet been announced.

Similarly our Oncotype DX products compete against a number of companies that offer products or have conducted research to profile genes and gene expression in breast, colon and prostate cancer. These companies include Agendia Inc., BioTheranostics, GenomeDx Biosciences Inc., Guardant Health, Inc., Hologic Inc., Myriad Genetics Inc. (and its Sividon Diagnostics subsidiary), Pacific Edge Limited, NanoString Technologies Inc., NeoGenomics, Inc., OPKO Health, Inc. (and its Bio-Reference Laboratories, Inc. subsidiary), Qiagen N.V. and Veracyte, Inc. Historically, our principal competition for our Oncotype DX tests has also come from existing diagnostic methods used by pathologists and oncologists, and such traditional diagnostic methods can be difficult to change or supplement. Our Oncotype DX tests also face competition from commercial laboratories with strong distribution networks for diagnostic tests, such as Laboratory Corporation of America Holdings and Quest Diagnostics Incorporated. Other potential competitors include companies that develop diagnostic tests such as Roche Diagnostics, a division of Roche Holding, Ltd, and Siemens AG, as well as other companies and academic and research institutions.

For our prostate cancer tests, we face comparatively greater competition than for our breast cancer tests, including competition from products which were on the market prior to our product launch and which are supported by clinical studies and published data. This existing direct and indirect competition for tests and procedures may make it difficult to gain market share, impact our ability to obtain reimbursement or result in a substantial increase in resources necessary for us to successfully continue to commercialize our Oncotype DX GPS prostate test and the Oncotype DX AR-V7 Nucleus Detect test.

We have changed the list price of our Oncotype DX tests in the past, and we expect to change prices for our tests in the future. Any increase or decrease in pricing could impact reimbursement of and demand for our tests. Others may develop lower priced tests that could be viewed by healthcare providers and payers as functionally equivalent to our tests, or offer tests at prices designed to promote market penetration, which could force us to lower the list prices of our tests and impact our operating margins and our ability to achieve sustained profitability. Additionally, our Oncotype DX tests are currently marketed as LDTs, and we may bring future products to market as LDT. Some competitors have developed tests cleared or approved for marketing by the FDA. There may be a marketing differentiation or perception in some markets that an FDA cleared or approved test is more desirable than an LDT, and that may discourage adoption of and reimbursement for our Oncotype DX tests.

We are aware of at least 5 companies that are developing or have developed liquid biopsy-based liver cancer screening or diagnostic tests – Laboratory for Advanced Medicine, JBS Science, EarlyDx, Glycotest and Epigenomics. Epigenomics recently received a CE mark for their HCCBloodTest.

Competitors may develop their own versions of our tests in countries where we did not apply for patents, where our patents have not issued or where our intellectual property rights are not recognized and compete with us in those countries, including encouraging the use of their test by healthcare providers or patients in other countries.

We may be unable to compete effectively against our competitors either because their products and services are superior or because they may have more expertise, experience, financial resources, or stronger business relationships. These competitors may have broader product lines and greater name recognition than we do. Furthermore, even if we do develop new marketable products or services, our current and future competitors may develop products and services that are more commercially attractive than ours, and they may bring those products and services to market earlier or more effectively than us. If we are unable to compete successfully against current or future competitors, we may be unable to increase market acceptance for and sales of our tests, which could prevent us from increasing or sustaining our revenues or achieving sustained profitability and could cause the market price of our common stock to decline.

If any of our facilities or our laboratory equipment were damaged or destroyed, or if we experience a significant disruption in our operations for any reason, our ability to continue to operate our business could be materially harmed.

We currently perform our Cologuard test in two laboratory facilities in Madison, Wisconsin. We manufacture the Cologuard test in a single facility in Madison, Wisconsin. Our headquarters are also located in Madison, Wisconsin.
As we expand the commercialization of products and services and increase the number of tests processed by our laboratory facilities, we believe it may be necessary to both expand our existing laboratory facilities and to add one or more new manufacturing and laboratory facilities in order to increase our manufacturing and processing capacity to meet anticipated demand. During 2018 we expanded the capacity at our first laboratory facility in Madison, Wisconsin to approximately three million Cologuard tests per year. In 2019, we began performing the Cologuard test out of a second laboratory facility in Madison, Wisconsin. We estimate our current annual capacity to perform the Cologuard test at approximately seven million tests per year. We are also in the process of building an additional manufacturing facility and additional warehouse and office space, which are expected to be completed in early 2020. Manufacturing in the new facility is expected to commence during 2020. We are also constructing a new headquarters facility in Madison, Wisconsin, which is expected to be completed in the first quarter of 2020. Failure to complete, or timely complete, these expansion projects, may significantly delay our Cologuard processing times and capabilities, or other operations, which may adversely affect our business, financial condition and results of operation. In addition, our financial condition may be adversely affected if we are unable to complete these expansion projects on budget and otherwise on terms and conditions acceptable to us. Finally, our financial condition will be adversely affected if demand for our products and services does not materialize in line with our current expectations and if, as a result, we end up building excess capacity that does not yield a reasonable return on our investment.

We perform our Oncotype DX tests out of our clinical laboratory facilities in Redwood City, California. Redwood City is situated near active earthquake fault lines and we do not have a redundant facility where we can perform our Oncotype DX tests. If our present, or any future facilities, were to be damaged, destroyed or otherwise unable to operate, whether due to fire, floods, storms, tornadoes, earthquakes, other inclement weather events or natural disasters, employee malfeasance, terrorist acts, power outages, or otherwise, it may render it difficult or impossible for us to perform our tests for some period of time and our business could be severely disrupted. Our facilities and the equipment we use to perform our tests would be costly to replace and could require substantial lead time to repair or replace. The inability to perform our tests or the backlog of tests that could develop if any of our facilities become inoperable for even a short period of time may result in the loss of customers or harm our reputation, and we may be unable to regain those customers in the future. Although we possess insurance for damage to our property and the disruption of our business, this insurance may not be sufficient to cover all of our potential losses and may not continue to be available to us on acceptable terms, if at all.

In order to rely on a third party to perform certain of our tests, we could only use another facility with established state licensure and CLIA accreditation under the scope of which Oncotype DX tests could be performed following validation and other required procedures. We cannot assure you that we would be able to find another CLIA certified facility willing to comply with the required procedures, that this laboratory would be willing to perform the tests for us on commercially reasonable terms, or that it would be able to meet our quality or regulatory standards. In order to establish a redundant clinical reference laboratory outside of our Redwood City, California facilities, we would have to spend considerable time and money securing adequate space, constructing the facility, recruiting and training employees, and establishing the additional operational and administrative infrastructure necessary to support a second facility. We may not be able, or it may take considerable time, to replicate our testing processes or results in a new facility. Additionally, any new clinical reference laboratory facility opened by us would be subject to certification under CLIA and licensing by several states, including California and New York, which could take a significant amount of time and result in delays in our ability to resume operations.

We rely upon certain single-source suppliers and loss or interruption of supply from single-source suppliers could have a disruptive effect on our business.

We purchase certain supplies from third-party suppliers and manufacturers. In some cases, due to the unique attributes of products that are incorporated into our tests, we maintain a single-source supplier relationship. These third parties are independent entities subject to their own unique operational, regulatory compliance, and financial risks that are outside our control. These third parties may not perform their obligations in a timely and cost-effective manner and they may be unwilling to increase production capacity commensurate with demand for our tests or future products or services. Moreover, we may become dependent on other single-source suppliers as we expand and develop our product and service pipeline. The loss of a single-source supplier, the failure to perform by a single-source supplier, the deterioration of our relationship with a single-source supplier or any unilateral modification to the contractual terms under which we are supplied materials by a single-source supplier could have a disruptive effect on our business, and could adversely affect our results of operations.
Failure in our information technology, storage systems or our clinical laboratory equipment could significantly disrupt our operations and our research and development efforts.

Our ability to execute our business strategy depends, in part, on the continued and uninterrupted performance of our information technology (“IT”) systems, which support our operations, including at our clinical laboratories, and our research and development efforts. We are dependent on our IT systems to receive and process test orders, securely store patient health records and deliver the results of our tests. The integrity and protection of our own data, and that of our customers and employees, is critical to our business. The regulatory environment governing information, security and privacy laws is increasingly demanding and continues to evolve. IT systems are vulnerable to damage from a variety of sources, including telecommunications or network failures, malicious human acts, breaches due to employee error and natural disasters. Moreover, despite network security and back-up measures, some of our servers are potentially vulnerable to physical or electronic break-ins, computer viruses and similar disruptive problems. Any such breach or interruption could compromise our networks and the information stored therein could be accessed by unauthorized parties, publicly disclosed, lost or stolen. Despite the precautionary measures we have taken to prevent unanticipated problems that could affect our IT systems, unauthorized access, loss or disclosure could also disrupt our operations, including our ability to:

- process tests, provide test results, bill payers or patients;
- process claims and appeals;
- provide customer assistance services;
- conduct research and development activities;
- collect, process and prepare company financial information;
- provide information about our tests and other patient and healthcare provider education and outreach efforts through our website; and
- manage the administrative aspects of our business and damage our reputation.

Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability under laws that protect the privacy of personal information, such as the Health Insurance Portability and Accountability Act of 1996, similar U.S. state data protection regulations, including the California Consumer Privacy Act, the E.U. General Data Protection Regulation, or GDPR, and other regulations, the breach of which could result in significant penalties.

In addition, the interpretation and application of consumer, health related and data protection laws in the U.S., Europe and elsewhere are often uncertain, contradictory and in flux. Genomic Health self-certified with the Department of Commerce for compliance with the U.S.-E.U. Privacy Shield in August 2016, and Exact Sciences self-certified in November 2019. We believe these self-certifications will mitigate customer concerns about overseas data transfers. However there continue to be concerns about whether the Privacy Shield will face additional challenges (similar to those that invalidated the prior Safe Harbor data transfer framework), and it is not guaranteed that companies who have self-certified under the Privacy Shield will be free of additional ongoing scrutiny by E.U. data protection authorities. Compliance with Privacy Shield requirements does not, in addition, equate to compliance with the stringent requirements of the GDPR. European data protection authorities could interpret or apply European data protection law in a manner that is inconsistent with our practices. If so, this could result in prohibitions on processing of data required to perform our tests in Europe or government-imposed fines, or both, which could adversely affect our business. Complying with these various laws could in addition cause us to incur substantial costs or require us to change our business practices and compliance procedures in a manner adverse to our business.

System upgrades and enhancements require significant expenditures and allocation of valuable employee resources. We recently deployed SAP SE and Epic Systems Corporation (“Epic”) software in our Madison, Wisconsin based operations and expect additional significant software upgrades and roll-outs in the next 12 months and beyond. We expect that Epic’s software will handle multiple components of our information technology system, from order entry all the way through revenue cycle and customer care. We continue to evaluate options to integrate Genomic Health's information technology systems and the schedule for conducting any such integration activities. Differences in software and systems across our operations may create complexity and compatibility problems. Delays in integration or disruptions to our business from implementation of new or upgraded systems could have a material adverse impact on our financial condition and operating results. There can be no assurance that our process of improving existing systems, developing new systems to support our expanding operations, integrating new systems, protecting confidential patient information, and improving service levels will not be delayed or that additional systems issues will not arise in the future. Failure to adequately protect and maintain the integrity of our information systems issues and data may result in a material adverse effect on our financial position, results of operations and cash flows.
We rely on courier delivery services to transport Cologuard collection kits to patients and samples for all of our tests back to laboratory facilities for analysis. If these delivery services are disrupted or become prohibitively expensive, customer satisfaction and our business could be negatively impacted.

In most cases, we ship Cologuard collection kits to patients, and patients ship samples to our Madison, Wisconsin laboratory facilities for analysis, by air and ground express courier delivery service. Additionally, medical providers typically ship samples for Oncotype DX testing to our laboratory facilities in Redwood City, California via air and ground express courier delivery service. Disruptions in delivery service, whether due to bad weather, natural disaster, labor disruptions, terrorist acts or threats, or for other reasons, can adversely affect customer satisfaction, specimen quality and our ability to provide our services on a timely basis. If the courier delivery services that transport Cologuard collection kits or other test samples institute significant price increases, our profitability would be negatively affected and we may need to identify alternative delivery methods, if possible, modify our service model, or attempt to raise our pricing, which may not be possible with regard to Medicare claims or commercially practicable with regard to commercial claims.

If we use hazardous materials in a manner that causes injury, we could be liable for damages.

Our activities currently require the use of hazardous materials and medical specimens. We cannot eliminate the risk of accidental contamination or injury to employees or third parties from the use, storage, handling or disposal of these materials or specimens. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our resources or any applicable insurance coverage we may have. Additionally, we are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products, as well as regulations relating to the safety and health of laboratory employees. The cost of compliance with these laws and regulations may become significant and could negatively affect our operating results.

The success of our business is substantially dependent upon the efforts of our senior management team and our ability to attract and retain personnel.

Our success depends largely on the skills, experience and performance of key members of our senior management team. Our executives are critical to directing and managing our growth and development in the future. Our success is substantially dependent upon our senior management’s ability to lead our company, implement successful corporate strategies and initiatives, develop key relationships, including relationships with collaborators and business partners, and successfully commercialize products and services. If we were to lose any of our senior management team, we may experience difficulties in competing effectively, developing our technologies and implementing our business strategies.

Competition for desirable personnel is intense, and there can be no assurance that we will be able to attract and retain the necessary staff. Our research and development programs, commercial laboratory operations and information technology infrastructure depend on our ability to attract and retain highly skilled personnel. We may not be able to attract or retain qualified talent due to the competition for qualified personnel among life science and technology businesses, particularly in the San Francisco Bay Area. We also face competition from universities and public and private research institutions in recruiting and retaining highly qualified scientific personnel. In addition, our success depends on our ability to attract and retain salespeople with extensive experience in primary care, oncology, gastroenterology and urology and close relationships with healthcare providers and other hospital personnel. All of our employees in the U.S. are at will, which means that either we or the employee may terminate their employment at any time. If we are not able to attract and retain the necessary personnel, our business and operating results could be harmed.

Our business and reputation will suffer if we are unable to establish and comply with, stringent quality standards to assure that the highest level of quality is observed in the performance of our tests.

Inherent risks are involved in providing and marketing cancer tests and related services. Patients and healthcare providers rely on us to provide accurate clinical and diagnostic information that may be used to make critical healthcare decisions. As such, users of our tests may have a greater sensitivity to errors than users of some other types of products and services.

We must maintain top service standards and FDA-mandated and other quality controls. Past or future performance or accuracy defects, incomplete or improper process controls, excessively slow turnaround times, unanticipated uses of our tests or mishandling of samples or test results (whether by us, patients, healthcare providers, courier delivery services or others) can lead to adverse outcomes for patients and interruptions to our services. These events could lead to voluntary or legally mandated safety alerts relating to our tests or our laboratory facilities and could result in the removal of our products and
services from the market or the suspension of our laboratories’ operations. Insufficient quality controls and any resulting negative outcomes could result in significant costs and litigation, as well as negative publicity that could reduce demand for our tests and payers’ willingness to cover our tests. Even if we maintain adequate controls and procedures, damaging and costly errors may occur.

Product and professional liability suits against us could result in expensive and time-consuming litigation, payment of substantial damages and increases in our insurance rates.

The sale and use of our tests could lead to product or professional liability claims. We may also be subject to liability for errors in the test results we provide to healthcare providers or for a misunderstanding of, or inappropriate reliance upon, the information we provide. Claims could also arise out of clinical studies we may conduct or any of our other activities. A product or professional liability claim could result in substantial damages, be costly and time consuming to defend, and cause material harm to our business, reputation or financial condition. We cannot assure you that our liability insurance would protect our assets from the financial impact of defending a product or professional liability claim. Any claim brought against us, with or without merit, could increase our liability insurance rates or prevent us from securing insurance coverage in the future.

Our inability to manage growth could harm our business.

In connection with the commercialization of our tests, we have added, and expect to continue to add personnel in the areas of sales and marketing, laboratory operations, billing and collections, quality assurance and compliance. Our number of full-time employees has increased from 1,268, as of December 31, 2017, to 1,977, as of December 31, 2018 and to 4,110, as of December 31, 2019. In particular, we added 896 employees in 2019 in connection with our combination with Genomic Health. Further, as we build our commercialization efforts and expand research and development activities for new products and services, the scope and complexity of our operations is increasing significantly. As a result of our growth, our operating expenses and capital requirements have also increased, and we expect that they will continue to increase significantly. Our ability to manage our growth effectively requires us to expend funds to improve our operational, financial and management controls, reporting systems and procedures. As we move forward in commercializing our tests, we will also need to effectively manage our growing manufacturing, laboratory operations and sales and marketing needs. We are continuing to expand our current facilities and add new facilities to support anticipated demand for our tests and anticipated growth in our personnel. We face various risks in managing these expansion efforts, including financing, construction delays, budget management, quality control, design efficiency, and transition execution. If we are unable to manage our anticipated growth effectively, our business could be harmed.

We may engage in acquisitions that could disrupt our business, cause dilution to our stockholders and reduce our financial resources.

We have recently undertaken certain acquisition activities. In October 2018, we acquired the stock of Biomatrica, Inc., and in November 2019, we completed our combination with Genomic Health. Certain risks may exist as a result of these acquisition activities, including, among others, that:

- we may encounter potential unknown liabilities and unforeseen increased expenses, delays or unfavorable conditions in connection with the closing of the acquisitions and the subsequent integration;
- we may be unable to successfully integrate the acquired business into our business;
- we may lose key employees;
- our management’s attention may be diverted;
- our expenses may be increased and our cash available for operations and other uses may be reduced;
- we may encounter unforeseen risks associated with contracts containing consent and/or other provisions that may be triggered by the acquisitions;
- we may be unable to realize the anticipated benefits of the acquisitions or do so within the anticipated timeframe;
- our future results will suffer if we do not effectively manage our expanded operations; and
- the market price of our common stock may decline as a result of the acquisitions.
In the future, we may enter into transactions to acquire other businesses, products, services or technologies. Because we have only made a limited number of acquisitions to date, our ability to do so successfully is unproven. If we do identify suitable candidates, we may not be able to make such acquisitions on favorable terms or at all. Any acquisitions we make may not strengthen our competitive position, and these transactions may be viewed negatively by investors, healthcare providers, patients and others. In addition to the risks outlined above, we may decide to incur debt in connection with an acquisition or issue our common stock or other securities to the stockholders of the acquired company, which would reduce the percentage ownership of our existing stockholders. We cannot predict the number, timing or size of future acquisitions or the effect that any such transactions might have on our operating results.

**International expansion of our business exposes us to business, regulatory, political, operational, financial, compliance and economic risks associated with doing business outside of the U.S.**

Our business strategy incorporates international expansion, which includes growing our direct sales and healthcare provider outreach and education capabilities outside of the U.S. and developing our relationships with international payers and distributors. Additionally, we are in the process of developing an IVD version of our Oncotype DX Breast Recurrence Score test, which we expect will be initially made available in Europe. Doing business internationally involves a number of risks, including:

- difficulties in complying with multiple, conflicting and changing laws and regulations such as tax laws, export and import restrictions, employment laws, data protection laws, regulatory requirements and other governmental approvals, permits and licenses;
- significant competition from local and regional product offerings;
- difficulties in complying with unclear product regulations in various jurisdictions, including the changing regulation in Europe with regard to medical device and IVD regulations;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payer reimbursement regimes, government payers or patient self-pay systems;
- logistics and regulations associated with shipping tissue samples or complying with local regulations concerning the analysis of tissue, including infrastructure conditions and transportation delays;
- limits in our ability to penetrate international markets if we are not able to process tests locally;
- lack of intellectual property protection in certain markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our tests and exposure to foreign currency exchange rate fluctuations;
- natural disasters, political and economic instability, including wars, terrorism, and political unrest, outbreak of disease, boycotts, curtailment of trade and other business restrictions; and
- regulatory and compliance risks that relate to maintaining accurate information and control over the activities of our salesforce and distributors that may fall within the purview of the U.S. Foreign Corrupt Practices Act, or FCPA, its books and records provisions or its anti-bribery provisions, or similar anti-bribery or anti-corruption laws or regulations, such as the U.K. Anti-bribery Act and the U.K. Criminal Finances Act.

Any of these factors could significantly harm our future international expansion and operations and, consequently, our financial condition and results of operations.

**Risks Relating to Governmental Regulation and Reimbursement**

*We face uncertainty related to healthcare reform, pricing, coverage and reimbursement, which could reduce our revenue.*

Healthcare reform laws, including the Patient Protection and Affordable Care Act (the “ACA”) and the Protecting Access to Medicare Act of 2014 (“PAMA”), are significantly affecting the U.S. healthcare and medical services industry. Existing legislation, and possible future legal and regulatory changes, including potential repeal or modification of the ACA, elimination of penalties regarding the individual mandate for coverage, or approval of health plans that allow lower levels of coverage for preventive services, could materially change the structure and finances of the health insurance system and the methodology for reimbursing medical services, drugs and devices, including our current and future products and services. The ACA has also been the subject of various legal challenges and in December 2018, a federal district court in Texas found that the ACA’s “individual mandate” was unconstitutional such that the whole of the ACA is invalid. The decision was appealed and, in December 2019, the Fifth Circuit Court of Appeals affirmed certain portions of the district court’s decision,
but remanded to the district court to determine if any portions of the ACA may still be valid. If the plaintiffs in this case, or in any other case challenging the ACA, are ultimately successful, insurance coverage for Cologuard could be materially and adversely affected. Any change in reimbursement policy could result in a change in patient cost-sharing, which could adversely affect a provider’s willingness to prescribe and patient’s willingness and ability to use our Cologuard test and any other product or service we may develop. Healthcare reforms, which may intend to reduce healthcare costs, may have the effect of discouraging third-party payers from covering certain kinds of medical products and services, particularly newly developed technologies, such as our Cologuard test or other products or tests we may develop in the future. We cannot predict whether future healthcare reform initiatives will be implemented at the federal or state level or the effect any such future legislation or regulation will have on us. The taxes imposed by new legislation, cost reduction measures and the expansion in the government’s role in the U.S. healthcare industry may result in decreased profits to us, which may adversely affect our business, financial condition and results of operations.

PAMA presents significant uncertainty for future CMS reimbursement rates for our tests. Because Medicare currently covers a significant number of our patients, any reduction in the CMS reimbursement rate for our tests would negatively affect our revenues and our business prospects. Under PAMA, CMS reimbursement rates for clinical diagnostic laboratory tests are updated every three years, or annually for clinical laboratory tests that are considered "advanced diagnostic laboratory tests". The CMS reimbursement rates for clinical diagnostic laboratory tests are updated based on the volume-weighted median of private payer rates for each clinical diagnostic laboratory test based on data submitted by certain applicable laboratories. Based on current regulations, we expect that the current CMS reimbursement rate for our Cologuard and Oncotype DX tests will remain unchanged until December 2021 and then will be reset for calendar years 2022-2024 based on the volume-weighted median of private payer rates for Cologuard during the data collection period from January 1, 2019 to June 30, 2019. Laboratories that fail to report or erroneously report required payment information may be subject to substantial civil money penalties. There can be no assurance under PAMA that adequate CMS reimbursement rates will continue to be assigned to our tests. Congress could modify or repeal PAMA in the future or CMS could modify regulations under PAMA, and any such action could have the effect of reducing the CMS reimbursement rate for our tests. Further, it is possible that Medicare or other federal payers that provide reimbursement for our tests may suspend, revoke or discontinue coverage at any time, may require co-payments from patients, or may reduce the reimbursement rates payable to us. Any such action could have a negative impact on our revenues.

Coverage of Cologuard and other screening products that we may develop may also depend, in whole or in part, on whether payers determine, or courts and/or regulatory authorities determine, coverage is required under applicable federal or state laws mandating coverage of certain cancer screening services. For example, Section 2713 of the ACA mandates that certain health insurers cover evidence-based items or services that have in effect a rating of “A” or “B” in the current recommendations of USPSTF without imposing any patient cost-sharing (“ACA Mandate”). Similarly, federal regulations require that Medicare Advantage plans cover “A” or “B” rated preventive services without patient cost-sharing. Following the June 2016 update to the USPSTF colorectal cancer screening recommendation statement, CMS issued an updated Evidence of Coverage notice for Medicare Advantage plans that affirms such plans must include coverage of Cologuard every three years for average risk individuals between the ages of 50 and 75 without patient cost-sharing. While we believe the ACA Mandate requires most health insurers to cover Cologuard for most patients between the ages of 50 and 75 without patient cost-sharing, some health insurers have disagreed and determined not to cover Cologuard and others may take that position in the future. It may be difficult for us or patients to enforce the ACA Mandate directly, and we may need to rely on states to take enforcement action, which they may choose not to do. It is also possible that the ACA Mandate will be repealed or overturned or significantly modified in the future.

Several states have laws mandating coverage for preventive services, such as colorectal cancer screening services, applicable to certain health insurers. However, not all of these laws apply to Cologuard and not all of these laws presently mandate coverage for patients within the 45-49 age range. We and payers may disagree about how these mandates apply to Cologuard and we may find the mandates difficult to enforce. Further, if the ACA is repealed, replaced or overturned, or even if it is not, states may decide to modify their laws, which may include repeal of those coverage mandates that we believe currently apply to Cologuard.
Outside of the U.S., we largely depend on public or government-controlled payers for coverage of our Oncotype DX tests. As compared to many more routine diagnostic tests, our Oncotype DX tests are more complicated, expensive and are performed in central, specialized labs. In order to accommodate the unique characteristics of our Oncotype DX tests, public payers in certain non-U.S. markets have designed reimbursement frameworks specifically for our tests. These payers could decide to modify or discontinue these special frameworks, potentially leading to lower reimbursement prices or the impossibility of providing the test in the market. These changes could also impose additional administrative burdens on us, such as complex public tendering procedures, or on ordering physicians, which could adversely affect the number of payers covering the test or the number of orders placed. Public payers could condition reimbursement of our tests upon performance of our tests locally or, even in laboratories owned or operated by the payers. Any such change would adversely affect our ability to continue to serve those patients through our centralized labs in Redwood City, California. We are developing an IVD version of the Oncotype DX Breast Recurrence Score test, which could be performed locally by laboratory partners and in hospitals around the world, however, those development efforts may be unsuccessful and any IVD version we may develop may not be approved by regulators or accepted by payers or patients.

**If third-party payers, including managed care organizations, do not approve and maintain reimbursement for our Cologuard and Oncotype DX tests at adequate reimbursement rates, our commercial success could be compromised.**

Our commercial success depends, in large part, on the availability of adequate reimbursement from government insurance plans, managed care organizations and private insurance plans. Although we received a positive coverage decision and what we believe is an adequate reimbursement rate from CMS for our Cologuard test, it is also critical that other third-party payers approve and maintain reimbursement for our Cologuard test at adequate reimbursement rates. Healthcare providers may be reluctant to prescribe, and patients may be reluctant to complete, our tests if they are not confident that patients will be reimbursed for our tests.

Third-party payers are increasingly attempting to contain healthcare costs by limiting both coverage and the level of reimbursement for new healthcare products. As a result, there is uncertainty surrounding the future level of reimbursement, if any, for our current tests and any new tests we may develop. Reimbursement by a third-party payer may depend on a number of factors, including a payer’s determination that tests using our technologies are: sufficiently sensitive and specific; not experimental or investigational; approved or recommended by the major guidelines organizations; subject to applicable federal or state coverage mandates; reliable, safe and effective; medically necessary; appropriate for the specific patient; and cost-effective.

Our Oncotype DX Breast Recurrence Score test has received certain negative assessments in the past relating to technology criteria for clinical effectiveness and appropriateness for use in patients with N+ disease, and our tests may receive similar negative assessments in the future. Since each payer makes its own decision as to whether to establish a policy to reimburse our tests, seeking these approvals is a time-consuming and costly process. To date, we have positive coverage determinations for our Oncotype DX breast cancer test for N-, ER+ patients from most third party payers in the United States through contracts, agreements or policy decisions. We cannot be certain that coverage for this test will be provided in the future by additional third party payers or that existing contracts, agreements or policy decisions or reimbursement levels, including tests processed as out of network, will remain in place or be fulfilled within existing terms and provisions.

We have obtained limited reimbursement from private third-party payers in the U.S. for our Oncotype DX colon cancer test and for our Oncotype DX breast cancer test for N+ and DCIS patients. Until further clinical data is presented, our N+ and DCIS indication for our breast cancer test and our colon cancer test may be considered investigational by payers and therefore may not be covered under their reimbursement policies.

We have obtained Medicare reimbursement coverage for our Oncotype DX GPS prostate cancer test for low and very-low risk patients and for favorable intermediate risk patients. However, we may not be able to obtain Medicare reimbursement coverage for this test for patients with different risk profiles or obtain other third-party payer reimbursement for our tests for patients with colon or prostate cancer or with N+ breast cancer or DCIS that is similar to the coverage we have obtained for our invasive breast cancer test for N-, ER+ patients.

Under the terms of the coverage determinations for our Oncotype DX GPS prostate cancer test, coverage for the test for patients with certain risk profiles is limited to tests ordered by healthcare providers who agree to participate in a Certification and Training Registry, or CTR, and to provide certain information about Medicare beneficiaries who receive our test. If healthcare providers do not timely submit necessary information as part of participating in the CTR, the timeframe in which we are reimbursed and recognize revenue for those tests may be accordingly delayed.
From time to time payers change processes that may affect timely payment. These changes may result in uneven cash flow or impact the timing of revenue recognized with these payers. Additionally, on a five-year rotational basis, Medicare requests bids for its regional Medicare Administrative Contractor, or MAC, services. In September 2013, the claims processing function for the jurisdiction in which we process Oncotype DX tests transitioned from Palmetto to Noridian Healthcare Solutions, although coverage determinations for those tests remain with Palmetto at this time through the MolDx Program. Future changes in the MAC with jurisdiction over our tests may affect our ability to obtain Medicare coverage and reimbursement for tests for which we have or may seek coverage.

Moreover, coverage determinations and reimbursement rates are subject to change, and we cannot guarantee that even if we initially achieve adequate coverage and reimbursement rates for our Cologuard and Oncotype DX tests, they will be continue to apply in the future. As noted above, under PAMA, our Medicare reimbursement rates will be subject to adjustment based on our volume-weighted median commercial reimbursement rate. Any reduction in our Medicare reimbursement rates could significantly and adversely affect our business prospects, financial condition and results of operations.

Even where a third-party payer agrees to cover one of our tests, other factors may have a significant impact on the actual reimbursement we receive from that payer. For example, if we do not have a contract with a given payer, we may be deemed an “out-of-network” provider by that payer, which could result in the payer allocating a portion of the cost of the test to the patient, notwithstanding any applicable coverage mandate. We may be unsuccessful in our efforts to enter into, or maintain, a network contract with a given payer, and we expect that our network status with a given payer may change from time to time for a variety of reasons, many of which may be outside our control. To the extent one of our tests is out of network for a given payer, healthcare providers may be less likely to prescribe that test for their patients and their patients may be less likely to comply with those prescriptions that are written. Also, some payers may require that they give prior authorization for a test before they are willing to pay for it or review claims post-service to ensure the service was medically appropriate for specific patients. Prior authorization and other medical management practices may require that we, patients or healthcare providers provide the payer with extensive medical records and other information. Prior authorization and other medical management practices impose a significant additional cost on us, may be difficult to comply with given our position as a laboratory that generally does not have direct access to patient medical records, may make healthcare providers less likely to prescribe our tests for their patients, and may make patients less likely to comply with healthcare provider orders for our tests, all or any of which may have an adverse effect on our revenues.

Because of Medicare billing rules or changes in Medicare billing rules and processes, we may not receive reimbursement for all tests provided to Medicare patients or may experience delays in receiving payments.

Under Medicare billing rules, payment for our Oncotype DX tests performed on Medicare beneficiaries who were hospital patients at the time the tumor tissue samples were obtained and whose tests were ordered less than 14 days from discharge must be bundled into the payment that the hospital receives for the services provided. Effective January 1, 2018, CMS changed its rules to permit laboratories that perform molecular pathology tests on specimens collected during a hospital outpatient stay to bill Medicare directly for such tests if they were performed following a hospital outpatient's discharge from the hospital outpatient department. The rule remains unchanged with respect to payment for our Oncotype DX tests performed on Medicare beneficiaries who were hospital inpatients at the time the tumor tissue was collected and whose tests were ordered less than 14 days from discharge – payment for those tests must be bundled into the payment that the hospital receives for its services provided. In these circumstances, hospitals are required to furnish services such as our tests as “services furnished under arrangements between a provider and an outside vendor” and only the hospital may bill Medicare for such tests. Under these circumstances, where the date of service for Medicare billing purposes is the date the specimen was collected and such date is within 14 days of inpatient discharge, we are required to bill hospitals for such tests. We refer to this rule, as it has been in effect and most recently amended as of January 1, 2018, as the Medicare Date of Service billing regulation.

These billing rules may lead to confusion regarding whether Medicare provides adequate reimbursement for our tests, and could discourage providers from ordering our tests for Medicare patients or even non-Medicare patients. In addition, changes in Medicare billing rules and processes could result in delays in receiving payments or receiving payments that are less than the original invoice. When hospitals disclaim responsibility for, or delay payment of, our bills for tests affected by the Medicare Date of Service rule, and when our collection efforts are unsuccessful, we may be forced to accept payments from hospitals that are less than the original invoice or we may be unable to collect from hospitals at all. Our inability to successfully collect payment from a hospital financially responsible for a test affected by the Medicare Date of Service rule may lead us to reject orders from that hospital that implicate the Medicare Date of Service billing regulation until any outstanding bills are paid. Compared to our breast cancer tests, a greater proportion of eligible patients for our colon and prostate Oncotype DX tests are covered by Medicare. We cannot assure you that Medicare will continue the Medicare Date of Service billing regulation in its
current form, that Medicare will not seek to include molecular pathology tests in hospital outpatient bundling rules in the future, or that other payers will not adopt similar billing rules. As described in Item 3 – Legal Proceedings, the United States Department of Justice is investigating Genomic Health’s compliance with the Medicare Date of Service billing regulation. An adverse outcome could include our being required to pay treble damages, incur civil and criminal penalties, paying attorneys’ fees, entering into a corporate integrity agreement, being excluded from participation in government healthcare programs, including Medicare and Medicaid, and other adverse actions that could materially and adversely affect our business, financial condition and results of operations.

If we are unable to obtain or maintain adequate reimbursement for our Oncotype DX tests outside of the U.S., our ability to expand internationally will be compromised.

The majority of our international Oncotype DX breast, prostate and colon cancer test revenues come from direct payer reimbursement, payments from our distributors, and patient self-pay. In many countries outside of the U.S., various coverage, pricing and reimbursement approvals are required for our tests to be available to patients. We expect that it will take several years to establish broad coverage and reimbursement for our tests with payers in countries outside of the U.S., and our efforts may not be successful.

Even if public or private reimbursement is obtained, it may cover competing tests, or the reimbursement may be conditioned upon local performance of the tests or other requirements we may have difficulty satisfying. We are developing an IVD version of our Oncotype DX Breast Recurrence Score test. We intend for the IVD version to be performed locally by laboratory partners and in hospitals. However, delays or failures in the development, validation, regulatory approval, or commercialization of the IVD device could have a significant negative effect on the business in countries requiring local performance. Even if we are able to successfully launch, an IVD version of our Oncotype DX Breast Recurrence Score test outside of the U.S., an IVD version of our test may be less commercially successful than we would hope. Local laboratories may not perform the IVD test with the same level of quality as we do in our centralized labs in Redwood City, California, which could damage the reputation of our tests and our company. Also, our costs to provide an IVD version of our Oncotype DX tests could be higher than our costs to provide our current versions, while our reimbursement rates for IVD tests could be lower.

Reimbursement levels outside of the U.S. may vary considerably from the domestic reimbursement amounts we receive. In addition, because we rely on distributors to obtain reimbursement for our tests in certain countries outside of the U.S., to the extent we do not have direct reimbursement arrangements with payers, we may not be able to retain reimbursement coverage in those countries if our agreement with a distributor is terminated or expires, if a distributor fails to pay us or for other reasons. We may also be negatively affected by the financial instability of, and austerity measures implemented by, several countries in the European Union and elsewhere.

If we fail to meet any applicable requirements of CLIA or similar state laws, that failure could adversely affect any future payer consideration of our technologies, prevent their approval entirely, and/or interrupt the commercial sale and/or marketing of any products and services and otherwise cause us to incur significant expense.

We and certain laboratories with whom we collaborate are subject to federal and state laws and regulations regarding the operation of clinical laboratories. Federal CLIA requirements and laws of certain states, including New York, impose certification requirements for clinical laboratories, establish standards for quality assurance and quality control, among other things. Some state laws restrict laboratory marketing activities, which may adversely affect our ability to market our laboratory services. Clinical laboratories are subject to inspection by regulators, and to sanctions for failing to comply with applicable requirements. Sanctions available under CLIA include prohibiting a laboratory from running tests, requiring a laboratory to implement a corrective plan, and imposing civil monetary penalties. If we or our third party partners fail to meet any applicable requirements of CLIA or state law, that failure could adversely affect any payer consideration of our current or future technologies, prevent their approval entirely, and/or interrupt the commercial sale and/or marketing of any products and services and otherwise cause us to incur significant expense.
We must maintain FDA approval for Cologuard and compliance with applicable FDA requirements; failure to maintain compliance with FDA requirements may prevent or delay the development, marketing or manufacturing of our Cologuard test, or future improvements to that test.

As a condition of the FDA approval of our Cologuard test, we were required to conduct a post-approval study. We anticipate that the post-approval study will conclude and final results presented to FDA in late 2020. The study has required, and will continue to require, significant funding and resources. There is a risk that the FDA may modify or withdraw the approval of Cologuard if the results of this post-approval study are not satisfactory or are inconsistent with previous studies. We have relied on third parties, such as contract research organizations, medical institutions and clinical investigators to conduct the post-approval study. We have limited control over the activities of these third parties and the post-approval study may be delayed or halted prior to its completion for reasons outside our control.

Additionally, our Madison, Wisconsin manufacturing and laboratory facilities are periodically subject to inspection by the FDA and other governmental agencies to ensure they meet production and quality requirements. Operations at these facilities could be interrupted or halted if the FDA or other governmental agency deems the findings of such inspections unsatisfactory.

Further, failure to comply with FDA or other regulatory requirements regarding the development, marketing, promotion, manufacturing and distribution of our tests could result in fines, unanticipated compliance expenditures, recall or seizures of our products, total or partial suspension of production or distribution, restrictions on labeling and promotion, termination of ongoing research, disqualification of data for submission to regulatory authorities, enforcement actions, injunctions and criminal prosecution.

If we do not meet applicable regulatory or quality standards, our products may be subject to recall, and, under certain circumstances, we may be required to notify applicable regulatory authorities about a recall. In 2017, we recalled one of the components of our Cologuard test kit and circumstances may arise that cause us to recall other products or components used in connection with our Cologuard test. Any such recalls could have an adverse effect on our ability to provide the Cologuard test, which in turn would adversely affect our financial condition.

Our inability to obtain without delay any necessary regulatory clearances or approvals for new medical devices, or improvements to or expanded indications for our current offerings, could prevent, delay or adversely impact future product commercialization.

We may develop new tests that are regulated by the FDA as medical devices or laboratory developed tests. Unless otherwise exempted, medical devices must receive either FDA regulatory approval or clearance before being marketed in the U.S. The FDA determines whether a medical device will require either regulatory approval or clearance based on statutory criteria that include the risk associated with the device and whether the device is similar to an existing, legally marketed product. The process to obtain either regulatory approval or clearance will likely be costly, time-consuming and uncertain. However, we believe the regulatory approval process is generally more challenging than the clearance process. Even if we design a product that we expect to be eligible for the regulatory clearance process, the FDA may require that the product undergo the regulatory approval process. There can be no assurance that the FDA will ever permit us to market any new product that we develop. Even if regulatory approval or clearance is granted, such approval may include significant limitations on indicated uses, which could materially and adversely affect the prospects of any new medical device.

FDA regulatory approval or clearance is not just required for new medical devices we develop, but would also be required for certain enhancements we may seek to make to our Cologuard test.

Delays in receipt of, or failure to obtain, clearances or approvals could materially delay or prevent us from commercializing our products or result in substantial additional costs that could decrease our profitability. In addition, even if we receive FDA clearance or approval for a new or enhanced product, the FDA may condition, withdraw or materially modify its clearance or approval.
If the FDA were to change its position with respect to its regulation of the laboratory developed tests we offer or may seek to offer in the future, we could incur substantial costs and time delays associated with meeting requirements for pre-market clearance or approval or we could experience decreased demand for or reimbursement of our tests.

The FDA has regulatory responsibility over, among other areas, instruments, test kits, reagents and other medical devices used by clinical laboratories to perform diagnostic testing. Clinical laboratories certified under the Clinical Laboratory Improvement Amendments of 1988, or CLIA, frequently develop internal laboratory developed tests, or “LDTs” to provide diagnostic results to customers. LDTs are subject to CMS oversight through its enforcement of CLIA. The FDA has also claimed regulatory authority over all LDTs, but indicates that it has exercised enforcement discretion with regard to most LDTs offered by CLIA-certified laboratories, and has not subjected these tests to the panoply of FDA rules and regulations governing medical devices. In Vitro Diagnostics (IVD) like our Cologuard test are regulated as medical devices by the FDA. We believe that our Oncotype DX tests are not diagnostic kits and also believe that they are LDTs that are subject to regulation under CLIA and applicable state laws. As a result, we believe our Oncotype DX products fall within the scope of FDA's exercise of enforcement discretion and should not be subject to FDA oversight or review under current FDA guidelines. Packaging requirements for receipt of tumor tissue for our Oncotype DX products may be subject to regulation under Department of Transportation, International Air Transport Association, and other state, regional, or local laws.

At various times since 2006, the FDA has issued documents outlining its intent to require varying levels of FDA oversight of many LDTs, including our tests. For example, in October 2014, the FDA published two draft guidance documents describing a proposed risk-based framework under which the FDA might regulate LDTs. The FDA’s draft framework proposed, among other things, premarket review for higher-risk LDTs, such as those that have the same intended use as FDA-approved or cleared diagnostics currently on the market. In November 2015, the FDA issued a report citing evidence for the need for additional regulation of LDTs and stated the FDA is continuing to work to finalize premarket review requirements for LDTs. However, in November 2016 the FDA announced it would not issue a final guidance for LDTs. In January 2017, the FDA issued a Discussion Paper on LDTs, which confirmed it would not finalize its guidance on the regulation of LDTs to allow more time for public discussion and time for the congressional authorizing committees to develop a legislative solution. It is unclear at this time if or when the FDA will finalize its plans to end enforcement discretion for LDTs; however, the FDA may decide to regulate certain LDTs on a case-by-case basis at any time.

In addition, legislative proposals addressing oversight of LDTs have been introduced in previous Congresses, and we expect that new legislative proposals will be introduced from time to time in the future. Notably, in December 2018, Congress released a bill, the Verifying Accurate Leading-edge IVCT Development Act, which would impose a risk-based regulatory framework for LDTs that would require certain pre-approvals through FDA, similar to past FDA proposed frameworks for the regulation of LDTs. However, it remains unknown whether Congress will enact this or any other legislation regulating LDTs and, if so, what regulatory approach Congress and FDA will adopt. Accordingly, we cannot provide any assurance that FDA regulation, including pre-market review, will not be required in the future for our Oncotype DX tests or new tests we develop, whether through finalization of guidance issued by the FDA, new enforcement policies adopted by the FDA or new legislation enacted by Congress. It is possible that legislation will be enacted into law or guidance could be issued by the FDA which may result in increased regulatory burdens for us to continue to offer our Oncotype DX tests or to develop and introduce new LDTs.

If pre-market review is required for our current LDTs, our business could be negatively impacted in the U.S. until such review is completed and clearance or approval is obtained, and the FDA could require that we stop selling our tests pending pre-market clearance or approval.

If our Oncotype DX tests are allowed to remain on the market but there is uncertainty about the regulatory status of such tests, if they are labeled investigational by the FDA, or if labeling claims the FDA allows us to make are more limited than the claims we currently make, orders or reimbursement may decline. The regulatory approval process may involve, among other things, successfully completing additional clinical trials and submitting a pre-market clearance notice or filing a pre-market approval application with the FDA. If pre-market review is required by the FDA, there can be no assurance that our LDTs will be cleared or approved on a timely basis, if at all, nor can there be assurance that the labeling claims cleared or approved by the FDA will be consistent with our current claims or adequate to support continued adoption of and reimbursement for our LDTs. Ongoing compliance with FDA regulations with respect to our current LDTs would increase the cost of conducting our business, and subject us to inspection by and the regulatory requirements of the FDA, for example registration and listing and medical device reporting, and penalties in the event we fail to comply with these requirements. We may also decide voluntarily to pursue FDA pre-market review of our LDTs if we determine that doing so would be appropriate.
We cannot predict the ultimate timing or form of final FDA guidance, legislation or regulation of LDTs and the potential impact on our existing tests, our tests in development or the materials used to perform our tests. While we qualify all materials used in our LDTs according to CLIA regulations, we cannot be certain that the FDA will not enact rules or guidance documents that could impact our ability to purchase certain materials necessary for the performance of our LDTs, such as products labeled for research use only. Should any of the reagents obtained by us from suppliers and used in conducting our LDTs be affected by future regulatory actions, our business could be adversely affected by those actions, including increasing the cost of testing or delaying and limiting or prohibiting the purchase of reagents necessary to perform testing.

**If we were required to conduct additional clinical trials prior to continuing to sell our current LDTs or launching any other LDTs we may develop, those trials could result in delays or failure to obtain necessary regulatory approvals or clearances, which could harm our business.**

If the FDA decides to regulate any of our LDTs, it may require additional pre-market clinical testing before clearing or approving such tests for commercial sales. Such pre-market clinical testing could delay the commencement or completion of other clinical testing, significantly increase our test development costs, delay commercialization of any future LTDs, and interrupt sales of our current LTDs. Many of the factors that may cause or lead to a delay in the commencement or completion of clinical trials may also ultimately lead to delay or denial of regulatory clearance or approval. The commencement of clinical trials may be delayed due to insufficient patient enrollment, which is a function of many factors, including the size of the patient population, the nature of the protocol, the proximity of patients to clinical sites and the eligibility criteria for the clinical trial.

We may find it necessary to engage contract research organizations to perform data collection and analysis and other aspects of our clinical trials, which might increase the cost and complexity of those trials. We may also depend on clinical investigators, medical institutions and contract research organizations to perform certain aspects of the trials. If these parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, or if the quality, completeness or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or for other reasons, our clinical trials may have to be extended, delayed or terminated. Many of these factors would be beyond our control. We may not be able to enter into replacement arrangements without undue delays or considerable expenditures. If there are delays in testing or approvals as a result of the failure to perform by third parties, our research and development costs would increase, and we may not be able to obtain regulatory clearance or approval for our LTDs. In addition, we may not be able to establish or maintain relationships with these parties on favorable terms, if at all. Each of these outcomes would harm our ability to market our LTDs, or to achieve sustained profitability.

**We are subject to numerous U.S. and foreign laws and governmental regulations, and any governmental enforcement action may materially affect our financial condition and business operations.**

We are subject to regulation in the United States by both the federal government and the states in which we conduct our business, as well as in other jurisdictions outside of the United States, including:

- Medicare billing and payment regulations applicable to clinical laboratories;
- the Federal Anti-Kickback Statute and state anti-kickback prohibitions and the Eliminating Kickbacks in Recovery Act of 2018 (“EKRA”);
- the Federal Physician Self-Referral Law, commonly known as the Stark Law, and the state equivalents;
- the Federal Health Insurance Portability and Accountability Act of 1996, as amended (“HIPAA”) and the California Consumer Privacy Act of 2018;
- the Medicare civil money penalty and exclusion requirements;
- the Federal False Claims Act civil and criminal penalties and state equivalents; and
- the Foreign Corrupt Practices Act, the United Kingdom Anti-bribery Act, the GDPR, and the E.U. In Vitro Diagnostic Device Regulation, all of which apply or will apply to our international activities.

The U.S. Attorney’s Offices have increased their scrutiny over the healthcare industry in recent years. The U.S. Congress, Department of Justice, Office of Inspector General of the Department of Health and Human Services, and Department of Defense have all issued subpoenas and other requests for information to conduct investigations of, and commenced civil and criminal litigation against, healthcare companies, related to financial arrangements with healthcare providers, regulatory compliance, product promotional practices, and documentation, coding and billing practices. In addition, the Federal False Claims Act and state equivalents have led to whistleblowers filing numerous qui tam civil lawsuits against healthcare companies, in part, because a whistleblower can receive a portion of any amount obtained by the government through such a lawsuit.
Governmental enforcement action or qui tam civil litigation against us may result in material costs and occupy significant management resources, even if we ultimately prevail. In addition, governmental enforcement action may result in substantial fines, penalties or administrative remedies, including exclusion from government reimbursement programs and entry into corporate integrity agreements with governmental agencies, which could entail significant obligations and costs. As described further in Item 3 – Legal Proceedings, we are being investigated by the United States Department of Justice related to our compliance with the Medicare Date of Service billing regulation. An adverse outcome could include our being required to pay treble damages, incur attorneys’ fees and penalties, and suffer other adverse consequences such as a corporate integrity agreement that could materially and adversely affect our business, financial condition and results of operations.

We have adopted policies and procedures designed to comply with these laws. In the ordinary course of our business, we conduct internal reviews of our compliance with these laws. Our compliance is also subject to governmental review. The growth of our business and sales organization and our expansion outside of the United States may increase the potential of violating these laws or our internal policies and procedures. The risk of our being found in violation of these or other laws and regulations is further increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Any action brought against us for violation of these or other laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management’s attention from the operation of our business. If our operations are found to be in violation of any of these laws and regulations, we may be subject to any applicable penalty associated with the violation, including civil and criminal penalties, damages and fines, we could be required to refund payments received by us, and we could lose the ability to bill for our tests and we could be required to curtail or cease our operations. Any of the foregoing consequences could seriously harm our business and our financial results.

Our business is subject to various complex laws and regulations applicable to clinical diagnostics. We could be subject to significant fines and penalties if we or our partners fail to comply with these laws and regulations.

As a provider of clinical diagnostic products and services, we and our partners are subject to extensive and frequently changing federal, state, local and foreign laws and regulations governing various aspects of our business. In particular, the clinical laboratory and healthcare industry is subject to significant governmental certification and licensing regulations, as well as federal, state and foreign laws regarding:

- test ordering and billing practices;
- marketing, sales and pricing practices;
- health information privacy and security, including HIPAA and comparable state laws;
- insurance;
- anti-markup legislation; and
- consumer protection.

We are also required to comply with FDA regulations, including with respect to our labeling and promotion activities. In addition, advertising of our tests is subject to regulation by the Federal Trade Commission, or FTC, and advertising of laboratory services is regulated by certain state laws. Violation of any FDA requirement could result in enforcement actions, such as seizures, injunctions, civil penalties and criminal prosecutions, and violation of any FTC or state law requirement could result in injunctions and other associated remedies, all of which could have a material adverse effect on our business. Most states also have similar regulatory and enforcement authority for devices. Additionally, most foreign countries have authorities comparable to the FDA and processes for obtaining marketing approvals. Obtaining and maintaining these approvals, and complying with all laws and regulations, may subject us to similar risks and delays as those we could experience under FDA, FTC and state regulation. We incur various costs in complying and overseeing compliance with these laws and regulations. The growth of our business and sales organization, the acquisition of additional businesses or products and services and our expansion outside of the U.S. may increase the potential of violating these laws, regulations or our internal policies and procedures.

Healthcare policy has been a subject of extensive discussion in the executive and legislative branches of the federal and many state governments and healthcare laws and regulations are subject to change. Development of the existing commercialization strategy for our tests and planned development of products in our pipeline has been based on existing healthcare policies. We cannot predict what additional changes, if any, will be proposed or adopted or the effect that such proposals or adoption may have on our business, financial condition and results of operations.
If we or our partners, including Pfizer, fail to comply with these laws and regulations, we could incur significant fines and penalties and our reputation and prospects could suffer. Additionally, any such partners could be forced to cease offering our products and services in certain jurisdictions, which could materially disrupt our business. As described further in Item 3—Legal Proceedings, the U.S. Department of Justice is investigating Genomic Health's compliance with the Medicare Date of Service billing regulation. An adverse outcome could include our being required to pay treble damages, incur civil and criminal penalties, paying attorneys’ fees, entering into a corporate integrity agreement, being excluded from participation in government healthcare programs, including Medicare and Medicaid, and other adverse actions that could materially and adversely affect our business, financial condition and results of operations.

**Due to billing complexities in the diagnostic and laboratory service industry, we may not be able to collect payment for the tests we perform.**

Billing for diagnostic and laboratory services is a complex process. Laboratories bill many different payers including patients, private insurance companies, Medicare, Medicaid, and employer groups, all of which have different billing requirements. We are continuing to work with third-party payers to cover and reimburse our tests. If we are unsuccessful, we may not receive payment for the tests we perform for patients on a timely basis, if at all, and we may not be able to provide services for patients with certain healthcare plans. We may have to litigate to enforce coverage obligations under Medicare laws and laws that mandate coverage for certain screening or diagnostic tests or to enforce contractual coverage obligations. Such litigation may be costly, may divert management attention from other responsibilities, may cause payers, including those not directly involved in the litigation, to resist contracting with us, and may ultimately prove unsuccessful for a variety of reasons. We may face lawsuits by government or commercial payers if they believe they have overpaid us for our test services or as a result of other circumstances. We may face write-offs of doubtful accounts, disputes with payers and patients, and long collection cycles. We may face patient dissatisfaction, complaints or lawsuits, including to the extent our tests are not fully covered by insurers and patients become responsible for all or part of the price of the test. As a result, patient demand for our tests could be adversely affected. To the extent patients express dissatisfaction with our billing practices to their healthcare providers, those healthcare providers may be less likely to prescribe our tests for other patients, and our business would be adversely affected.

**Even if payers do agree to cover our tests, our billing and collections process may be complicated by the following and other factors, which may be beyond our control:**

- disputes among payers as to which payer is responsible for payment;
- disparity in coverage among various payers or among various healthcare plans offered by a single payer;
- payer medical management requirements, including prior authorization requirements;
- differing information and billing requirements among payers; and
- failure by patients or healthcare providers to provide complete and correct billing information.

Sometimes, when we have a contract with a commercial payer to cover our tests, we are not permitted to bill patients insured by that payer for amounts beyond deductibles, co-payments and co-insurance as prescribed in the coverage agreement between the payer and the patients. Therefore, when such contracted payers do not pay us our full, contracted rate for a test, for example, for failure to satisfy prior-authorization or other payer medical management requirements, we may not be permitted to collect the balance from the patient and our business is adversely impacted.

The uncertainty of receiving payment for our tests and complex laboratory billing processes could negatively affect our business and our operating results.
Some of our activities may subject us to risks under federal and state laws prohibiting ‘kickbacks’ and false or fraudulent claims.

In addition to FDA marketing and promotion restrictions, several other types of state and federal healthcare fraud and abuse laws have been applied in recent years to restrict certain marketing practices in the healthcare product and service industry and to regulate billing practices and financial relationships with healthcare providers, hospitals and other healthcare providers. These laws include a federal law commonly known as the Medicare/Medicaid anti-kickback law, and several similar state laws, which prohibit payments intended to induce healthcare providers or others either to refer patients or to acquire or arrange for or recommend the acquisition of healthcare products or services. While the federal law applies only to referrals, products or services for which payment may be made by a federal healthcare program, state laws often apply regardless of whether federal funds may be involved. These laws constrain the sales, marketing and other promotional activities of manufacturers of medical devices and providers of laboratory services by limiting the kinds of financial arrangements, including sales programs, that may be used with hospitals, healthcare providers, laboratories and other potential purchasers or prescribers of medical devices and laboratory services. Other federal and state laws generally prohibit individuals or entities from knowingly presenting, or causing to be presented, claims for payment from Medicare, Medicaid, or other third-party payers that are false or fraudulent, or are for items or services that were not provided as claimed.

In 2018, Congress passed EKRA as part of the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act. Similar to the Medicare/Medicaid anti-kickback law, EKRA imposes criminal penalties for knowing or willful payment or offer, or solicitation or receipt, of any remuneration, whether directly or indirectly, overtly or covertly, in cash or in kind, in exchange for the referral or inducement of laboratory testing (among other healthcare services) unless a specific exception applies. However, unlike the Medicare/Medicaid anti-kickback law, EKRA is not limited to services covered by federal or state healthcare programs but applies more broadly to services covered by “healthcare benefit programs,” including commercial insurers. As currently drafted, EKRA potentially expands the universe of arrangements that could be subject to government enforcement under federal fraud and abuse laws. In addition, while the Medicare/Medicaid anti-kickback law includes certain exceptions that are widely relied upon in the healthcare industry, not all of those same exceptions apply under EKRA. Because EKRA is a relatively new law, there is no agency guidance or court precedent to indicate how and to what extent it will be applied and enforced. We cannot assure you that our relationships with healthcare providers, sales representatives, hospitals, customers, or any other party will not be subject to scrutiny or will survive regulatory challenge under EKRA.

Additionally, to avoid liability under federal false claims laws, we must carefully and accurately code claims for reimbursement, proactively monitor the accuracy and appropriateness of Medicare claims and payments received, diligently investigate any credible information indicating that we may have received an overpayment, and promptly return any overpayments. Medicare payments are subject to audit, including through the Comprehensive Error Rate Testing (CERT) program, and payments may be recouped by CMS if it is determined that they were improperly made. Currently, a significant percentage of our revenues are generated by payments from Medicare. The federal anti-kickback statute and certain false claims laws prescribe civil and criminal penalties (including fines) for noncompliance that can be substantial. While we continually strive to comply with these complex requirements, interpretations of the applicability of these laws to marketing and billing practices are constantly evolving and even an unsuccessful challenge could cause adverse publicity and be costly to respond to, and thus could harm our business and prospects. Our failure to comply with applicable laws could result in various adverse consequences that could have a material adverse effect upon our business, including the exclusion of our products and services from government programs and the imposition of civil or criminal sanctions.

Some of our activities may subject us to risks under foreign laws prohibiting ‘kickbacks’ as well as the Foreign Corrupt Practices Act.

Many countries in which we offer our tests in have anti-kickback regulations prohibiting providers from offering, paying, soliciting or receiving remuneration, directly or indirectly, in order to induce business that is reimbursable under any national healthcare program. In situations involving healthcare providers employed by state-funded institutions or national healthcare agencies, violation of the local anti-kickback law may also constitute a violation of the U.S. Foreign Corrupt Practices Act, or FCPA.
The FCPA prohibits any U.S. individual, business entity or employee of a U.S. business entity from offering or providing, directly or through a third party, including the distributors we rely on in certain markets, anything of value to a foreign government official with corrupt intent to influence an award or continuation of business or to gain an unfair advantage, whether or not such conduct violates local laws. In addition, it is illegal for a company that reports to the SEC to have false or inaccurate books or records or to fail to maintain a system of internal accounting controls. We are also required to maintain accurate information and control over sales and distributors’ activities that may fall within the purview of the FCPA, its books and records provisions and its anti-bribery provisions.

The standard of intent and knowledge in the anti-bribery cases is minimal, and intent and knowledge are usually inferred from that fact that bribery took place. The accounting provisions do not require intent. Violations of the FCPA’s anti-bribery provisions for corporations and other business entities may result in a fine of up to $2 million and officers, directors, stockholders, employees, and agents are subject to a fine of up to $100,000 and imprisonment for up to five years. Other countries, including the United Kingdom and other OECD Anti-Bribery Convention members, have similar anti-corruption regulations, such as the United Kingdom Bribery Act.

Compliance with the HIPAA security, privacy and breach notification regulations may increase our costs.

The HIPAA privacy, security and breach notification regulations, including the expanded requirements under HITECH, establish comprehensive federal standards with respect to the uses and disclosures of protected health information (“PHI”) by health plans, healthcare providers and healthcare clearinghouses, in addition to setting standards to protect the confidentiality, integrity and security of PHI. The regulations establish a complex regulatory framework on a variety of subjects, including:

- the circumstances under which uses and disclosures of PHI are permitted or required without a specific authorization by the patient, including but not limited to treatment purposes, activities to obtain payments for our services, and our healthcare operations activities;
- a patient’s rights to access, amend and receive an accounting of certain disclosures of PHI;
- requirements to notify individuals if there is a breach of their PHI;
- the contents of notices of privacy practices for PHI;
- administrative, technical and physical safeguards required of entities that use or receive PHI; and
- the protection of computing systems maintaining electronic PHI.

We have implemented practices intended to meet the requirements of the HIPAA privacy, security and breach notification regulations, as required by law. We are required to comply with federal privacy, security and breach notification regulations as well as varying state privacy, security and breach notification laws and regulations, which may be more stringent than federal HIPAA requirements. In addition, for healthcare data transfers from other countries relating to citizens of those countries, we must comply with the laws of those countries. The federal privacy regulations restrict our ability to use or disclose patient identifiable data, without patient authorization, for purposes other than payment, treatment, healthcare operations and certain other specified disclosures such as public health and governmental oversight of the healthcare industry.

HIPAA provides for significant fines and other penalties for wrongful use or disclosure of PHI, including potential civil and criminal fines and penalties. Computer networks are always vulnerable to breach and unauthorized persons may in the future be able to exploit weaknesses in the security systems of our computer networks and gain access to PHI. Additionally, we share PHI with third-parties who are legally obligated to safeguard and maintain the confidentiality of PHI. Unauthorized persons may be able to gain access to PHI stored in such third-parties computer networks. Any wrongful use or disclosure of PHI by us or such third-parties, including disclosure due to data theft or unauthorized access to our or our third-parties computer networks, could subject us to fines or penalties that could adversely affect our business and results of operations. Although the HIPAA statute and regulations do not expressly provide for a private right of damages, we could also incur damages under state laws to private parties for the wrongful use or disclosure of confidential health information or other private personal information.

We expect to rely on third parties to conduct any future studies of our technologies that may be required by the FDA or other US or foreign regulatory bodies, and those third parties may not perform satisfactorily.

We expect to rely on third parties such as contract research organizations, medical institutions and clinical investigators to conduct studies, including the post-approval studies required by the FDA for our Cologuard test. Our reliance on these third parties for clinical development activities will reduce our control over these activities. These third-parties may not complete activities on schedule or conduct studies in accordance with regulatory requirements or our study design. Our reliance on third
parties that we do not control will not relieve us of our requirement to prepare, and ensure our compliance with, various procedures required under good clinical practices, even though third-party contract research organizations may prepare and comply with their own, comparable procedures. If these third parties do not successfully carry out their contractual duties or regulatory obligations or meet expected deadlines, if the third parties need to be replaced or if the quality or accuracy of the data they obtain is compromised due to the failure to adhere to our clinical protocols or regulatory requirements or for other reasons, our studies may be extended, delayed, suspended or terminated, and we may not be able to obtain a required regulatory approval.

We are subject to increasingly complex taxation rules and practices, which may affect how we conduct our business and our results of operations.

As our business grows, we are required to comply with increasingly complex taxation rules and practices. We are subject to tax in multiple U.S. tax jurisdictions and in foreign tax jurisdictions as we continue to expand internationally. The development of our tax strategies requires additional expertise and may impact how we conduct our business. Our future effective tax rates could be unfavorably affected by changes in, or interpretations of, tax rules and regulations in the jurisdictions in which we do business or by changes in the valuation of our deferred tax assets and liabilities. Furthermore, we provide for certain tax liabilities that involve significant judgment. We are subject to the examination of our tax returns by federal, state and foreign tax authorities, which could focus on our intercompany transfer pricing methodology as well as other matters. If our tax strategies are ineffective or we are not in compliance with domestic and international tax laws, our financial position, operating results and cash flows could be adversely affected.

Risks Relating to Product Development, Commercialization and Sales of our Products

We have finite resources, which may restrict our success in commercializing our Cologuard and Oncotype DX tests and other products we may develop, and we may be unsuccessful in entering into or maintaining third-party arrangements to support our internal efforts.

To grow our business as planned, we must expand our sales, marketing and customer support capabilities, which will involve developing and administering our commercial infrastructure and/or collaborative commercial arrangements and partnerships. We must also maintain satisfactory arrangements for the manufacture and distribution of our tests. Also, we operate CLIA certified lab facilities to process our tests and provide patient results.

Prior to our combination with Genomic Health, we only had one commercial test. We have limited experience managing a sales force, customer support operation and operating manufacturing and clinical laboratory operations for multiple products in multiple locations with divergent regulatory requirements. We may encounter difficulties retaining and managing the specialized workforce these activities require. We may seek to partner with others to assist us with any or all of these functions. However, we may be unable to find appropriate third parties with whom to enter into these arrangements.

Our sales efforts have grown in size and complexity. We now maintain sales forces with primary care, oncology, GI, urology and women's health call points. We must coordinate among our internal sales teams, as well as with Pfizer's, to ensure that we are effectively and compliantly marketing our tests.

If we are unable to deploy and maintain effective sales, marketing and medical affairs capabilities, we will have difficulty achieving market awareness and selling our products and services.

To achieve commercial success for our Cologuard and Oncotype DX tests and our future products and services, we must continue to develop and grow our sales, marketing and medical affairs organizations to effectively explain to healthcare providers the reliability, effectiveness and benefits of our current and future products and services as compared to alternatives. We may not be able to successfully manage our dispersed or inside sales forces or our sales force may not be effective. Because of the competition for their services, we may be unable to hire, partner with or retain additional qualified sales representatives or marketing or medical affairs personnel, either as our employees or independent contractors or through independent sales or other third-party organizations. Market competition for commercial, marketing and medical affairs talent is significant, and we may not be able to hire or retain such talent on commercially reasonable terms, if at all.

Establishing and maintaining sales, marketing and medical affairs capabilities will be expensive and time-consuming. Our expenses associated with maintaining our sales force may be disproportional compared to the revenues we may be able to generate on sales of the Cologuard and Oncotype DX tests or any future products or services.
The success of our Cologuard test, our Oncotype DX tests and any other screening or diagnostic product or service we may offer or develop will depend on the degree of market acceptance by healthcare providers, patients, healthcare payers and others in the medical community.

Our products and services may not gain market acceptance by healthcare providers, healthcare payers and others in the medical community. The degree of market acceptance of our Cologuard test, our Oncotype DX tests, and other products and services that we may offer will depend on a number of factors, including:

- demonstrated performance and utility;
- price;
- the availability and attractiveness of alternative tests;
- the willingness of healthcare providers to prescribe our products and services;
- the ease of use of our ordering process for healthcare providers; and
- adequate third-party coverage or reimbursement.

Our assumptions regarding the market opportunity for our products or services may not prove true. For example, we estimate the potential market opportunity for Cologuard assuming, among other things, the size of the screening population, the adoption rate in the screening population and a three-year screening interval. Although ACS guidelines and others recommend a three-year screening interval for Cologuard and CMS has determined that Medicare will cover the test at this interval, the label for Cologuard does not specify a three-year interval and healthcare providers, healthcare payers, the FDA and other regulators and opinion leaders could recommend a different interval. Further, patients may not adhere to any recommended testing interval.

Recommendations, guidelines and quality metrics issued by various organizations may significantly affect payers’ willingness to cover, and healthcare providers’ willingness to prescribe, our products.

Securing influential recommendations, inclusion in healthcare guidelines and inclusion in quality measures are keys to our healthcare provider and payer engagement strategies. These guidelines, recommendations and quality metrics may shape payers’ coverage decisions and healthcare providers’ cancer screening procedures.

The U.S. Preventative Services Task Force ("USPSTF"), a panel of primary care providers and epidemiologists and other national experts funded by the U.S. Department of Health and Human Services’ Agency for Healthcare Research and Quality, makes influential recommendations on clinical preventative services. In June 2016, USPSTF issued an updated recommendation statement for colorectal cancer screening, and gave an "A" grade to colorectal cancer screening starting at age 50 and continuing until age 75. The statement specifies seven screening methods, including FIT-DNA (which is Cologuard). USPSTF updates its screening recommendations periodically, approximately every five to eight years. USPSTF distributed a draft research plan for public comment on January 3, 2019 and released a final research plan on May 16, 2019. The research plan will be used to guide a systematic review of the evidence by researchers at an evidence-based practice center. The resulting evidence review will form the basis of the next update to the USPSTF recommendation statement regarding colorectal cancer screening. We cannot be certain when USPSTF will next update its colorectal cancer screening recommendations, whether updated recommendations will continue to give an “A” grade to colorectal cancer screening between the ages of 50 and 75, whether updated recommendations will lower the screening commencement age to 45, whether updated recommendations will continue to include FIT-DNA, whether updated recommendations may take a different format, including by ranking or tiering different methodologies and positioning FIT-DNA below other methodologies, or whether updated recommendations will include new technologies that are competitive with Cologuard and that may have greater appeal to healthcare providers, patients and payers. Any update to the USPSTF recommendations that may have the effect of reducing screening, that does not include FIT-DNA in a favorable manner, or that adds new technologies could have a material adverse effect on our business. Further, while FDA expanded Cologuard’s indication in September 2019 to include average-risk individuals ages 45-49 and while ACS recommends colorectal cancer screening for that population, if updated USPSTF recommendations do not recommend that screening commence at age 45, adoption of screening generally, and Cologuard specifically, within the 45-49 age band may be limited.

Maintaining a high USPSTF recommendation for Cologuard may have certain potentially significant implications. For example, the ACA mandates that certain non-grandfathered health insurers cover evidence-based items or services that have in effect a rating of “A” or “B” in the current recommendations of USPSTF without imposing any patient cost-sharing. Similarly, federal regulations require that Medicare Advantage plans cover “A” or “B” graded preventive services without patient cost-sharing. Following the updated 2016 USPSTF recommendation statement, the Centers for Medicare & Medicaid Services
and we may not be able to acquire such technologies on commercially reasonable terms or at all. Product development is expensive, may take years to complete before we identify a potentially successful candidate. We may need to acquire, whether through purchase, license or otherwise, technologies owned by third parties, the candidate product or service. Any cancer diagnostic test we develop will need to address an unmet medical need with accurate performance and utility.

demonstrate in clinical studies a high level of accuracy. Because cancer screening tests seek to identify relatively rare occurrences, if in a clinical study a candidate achieve the desired results in larger clinical studies or may not achieve acceptable levels of clinical accuracy. Any cancer screening test we develop will need to

While we believe the ACA Mandate requires certain health insurers to cover Cologuard for individuals between the ages of 50 and 75, the ACA Mandate does not currently extend to screening within the 45-49 age group because USPSTF currently does not currently recommend screening for that group. If USPSTF does not include the 45-49 age group in its updated recommendations, reimbursement for Cologuard within that group would not be compelled by the ACA and therefore might be adversely affected.

The healthcare industry in the United States has experienced a trend toward cost containment and value-based purchasing of healthcare services. Some government and private payers are adopting pay-for-performance programs that differentiate payments for healthcare services based on the achievement of documented quality metrics, cost efficiencies or patient outcomes. Payers may look to quality measures such as the National Committee for Quality Assurance (“NCQA”), Healthcare Effectiveness Data and Information Set (“HEDIS”) and the CMS Medicare Advantage Star Ratings to assess quality of care. These measures are intended to provide incentives to service providers to deliver the same or better results while consuming fewer resources. Cologuard has been included NCQA's HEDIS measures since 2017 and in CMS's Medicare Advantage Star Ratings since 2018. If for some reason Cologuard was removed from, or not included in, HEDIS, the Star Ratings or other quality metrics, payers may be less inclined to reimburse our Cologuard test at adequate levels, if at all, which could adversely impact our business. Additionally, if Cologuard was removed from, or not included in, HEDIS, the Star Ratings or other quality metrics, healthcare providers may not earn quality credit for prescribing Cologuard and therefore may be less inclined to do so. If Cologuard fails to maintain its current position within any updated USPSTF colorectal cancer screening recommendations, Cologuard may, as a result, become excluded from the HEDIS measures and the Star Ratings.

We expect to make significant investments to research and develop new cancer tests, which may not be successful.

We are seeking to increase Cologuard’s specificity by substituting new biomarkers and to develop a pipeline for future products and services, including screening and diagnostic tests for liver, pancreatic, esophageal, lung and other types of cancers. Also, we are working to develop an IVD version of our Oncotype DX Breast Recurrence Score test. We expect to incur significant expenses on these development efforts, but they may not be successful.

Developing new or improved cancer tests is a speculative and risky endeavor. Candidate products and services that may initially show promise may fail to achieve the desired results in larger clinical studies or may not achieve acceptable levels of clinical accuracy. Any cancer screening test we develop will need to demonstrate in clinical studies a high level of accuracy. Because cancer screening tests seek to identify relatively rare occurrences, if in a clinical study a candidate product or service fails to identify even a small number of cancer cases, the sensitivity rate may be materially and adversely affected and we may have to abandon the candidate product or service. Any cancer diagnostic test we develop will need to address an unmet medical need with accurate performance and utility.

We may need to explore a number of different biomarker combinations, alter our candidate products or platform technologies and repeat clinical studies before we identify a potentially successful candidate. We may need to acquire, whether through purchase, license or otherwise, technologies owned by third parties, and we may not be able to acquire such technologies on commercially reasonable terms or at all. Product development is expensive, may take years to complete and can

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have uncertain outcomes. Failure can occur at any stage of the development. If, after development, a candidate product or service appears successful, we may, depending on the nature of the product or service, still need to obtain FDA and other regulatory clearances or approvals before we can market it. The FDA’s clearance or approval pathways are likely to involve significant time, as well as additional research, development and clinical study expenditures. There can be no guarantee that the FDA would clear or approve any future product or service we may develop. Even if the FDA clears or approves a new product or service we develop, we would need to commit substantial resources to commercialize, sell and market it before it could be profitable, and the product or service may never be commercially viable. Additionally, development of any product or service may be disrupted or made less viable by the development of competing products or services.

If we determine that any of our current or future development programs is unlikely to succeed, we may abandon it without any return on our investment into the program. We may need to raise significant additional capital to bring any new products or services to market, which may not be available on acceptable terms, if at all.

Our dependence on distributors for sales outside of the U.S. could limit or prevent us from selling our tests in foreign markets and impact our revenue.

As of December 31, 2019, we have entered into exclusive distribution agreements for the sale of our Oncotype DX tests with distributors covering more than 90 countries. We may enter into other similar arrangements to distribute our tests in other countries in the future. We intend to continue to grow our business internationally, and to do so we may need to attract additional distributors to expand the territories in which we sell our tests. Despite contractual obligations, distributors may not commit the necessary resources to market and sell our tests to the level of our expectations. If current or future distributors do not perform adequately, or we are unable to enter into or maintain arrangements with distributors to market our tests in particular geographic areas, we may not realize long-term international revenue growth. Additionally, local laws may make it very difficult or costly for us to terminate or replace distributors. Furthermore, our revenue from distributors could be negatively impacted as a result of changes in business cycles, business or economic conditions, coverage determinations, reimbursement rates, changes in foreign currency exchange rates that make our tests more expensive in our distributors’ local currencies or other factors that could affect their ability to pay us for tests on a timely basis or at all.

We have entered into a Promotion Agreement with Pfizer regarding the commercialization of Cologuard. If we or Pfizer fail to adequately perform under the Promotion Agreement, or if the Promotion Agreement is terminated prior to its full term, our business, prospects, financial condition and results of operations could be adversely affected.

In August 2018, we entered into a Promotion Agreement (“Promotion Agreement”) with Pfizer, Inc. (“Pfizer”), pursuant to which Pfizer will promote Cologuard and provide certain sales, marketing, analytical and other commercial operations support services. We and Pfizer committed in the Promotion Agreement to invest specified amounts in the advertising and promotion of Cologuard. We agreed to pay Pfizer a service fee based on incremental gross profits over specified baselines and pay Pfizer royalties for Cologuard-related revenues for a specified period after the expiration or termination of the Promotion Agreement.

The initial term of the Promotion Agreement is scheduled to run through December 31, 2021, but may be terminated by either party at any time on or after February 21, 2020 upon six months’ written notice to the other party.

We have dedicated significant time and resources to negotiating, implementing and coordinating performance under the Promotion Agreement. The growth in Cologuard revenue we anticipate as a result of the Promotion Agreement may not occur. We may not realize the expected benefits from the Promotion Agreement for a number of reasons including, among others, if we and Pfizer fail to coordinate our promotional efforts effectively, if Pfizer fails to optimally or effectively promote, market and sell Cologuard or otherwise fails to perform under the Promotion Agreement, if Pfizer prioritizes the promotion of its own, or other partners’, products or services over Cologuard, if the Promotion Agreement is terminated before its anticipated benefits can be fully realized, or if other factors, extraneous to the Promotion Agreement, adversely impact sales of Cologuard (for example, reimbursement, competition, or seasonal factors). We have limited experience executing under co-promotion agreements and Pfizer has limited experience promoting molecular diagnostic products. Our strategic partnership with Pfizer will impact the retention and development of our own sales and marketing capabilities, both for Cologuard and other products in our pipeline. If we do not realize the expected benefits from the Promotion Agreement, either because Pfizer’s marketing strategy and sales and marketing expertise do not translate well to the promotion of Cologuard or for any other reason, our business, prospects, financial condition and results of operations may be adversely affected.

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Our research and development efforts will be hindered if we are not able to obtain samples, contract with third parties for access to samples or complete timely enrollment in future clinical trials.

Access to human sample types, such as blood, tissue, stool, or urine is necessary for our research and product development. Acquiring samples from individuals with clinical diagnoses or associated clinical outcomes through purchase or clinical studies is necessary. Lack of available samples can delay development timelines and increase costs of development. Generally, the agreements under which we gain access to human samples are non-exclusive. Other companies may compete with us for access. Additionally, the process of negotiating access to samples can be lengthy and it may involve numerous parties and approval levels to resolve complex issues such as usage rights, institutional review board approval, privacy rights, publication rights, intellectual property ownership and research parameters. If we are not able to negotiate access to clinical samples with research institutions, hospitals, clinical partners, pharmaceutical companies, or companies developing therapeutics on a timely basis, or at all, or if other laboratories or our competitors secure access to these samples before us, our ability to research, develop and commercialize future products will be limited or delayed. Finally, we may not be able to conduct or complete clinical trials on a timely basis if we are not able to enroll sufficient numbers of patients in such trials, and our failure to do so could have an adverse effect on our research and development and product commercialization efforts.

Risks Relating to our Intellectual Property

We rely on strategic collaborative and licensing arrangements with third parties to develop critical intellectual property. We may not be able to successfully establish and maintain such intellectual property.

The development and commercialization of our products and services rely, directly or indirectly, upon strategic collaborations and licensing agreements with third parties. We have collaborative and licensing arrangements with Mayo Foundation for Medical Education and Research, under which Mayo provides us with product development and research and development assistance. Certain of Mayo's obligations to provide development assistance expired in January 2020. We and Mayo are in discussions to amend our license agreement to extend that date. In addition, we have licensing agreements with Hologic, Biocartis, Epic Sciences and others. Such arrangements provide us with intellectual property and other business rights crucial to our product development and commercialization. We have incorporated licensed technology into our Cologuard test. Our dependence on licensing, collaboration and other similar agreements with third parties may subject us to a number of risks. There can be no assurance that any current contractual arrangements between us and third parties or between our strategic partners and other third parties will be continued on materially similar terms and will not be breached or terminated early. Any failure to obtain or retain the rights to necessary technologies on acceptable commercial terms could require us to re-configure our products and services, which could negatively impact their commercial sale or increase the associated costs, either of which could materially harm our business and adversely affect our future revenues and ability to achieve sustained profitability.

We expect to continue and expand our reliance on collaborative and licensing arrangements. Establishing new strategic collaborations and licensing arrangements is difficult and time-consuming. Discussions with potential collaborators or licensors may not lead to the establishment of collaborations on favorable terms, if at all. To the extent we agree to work exclusively with one collaborator in a given area, our opportunities to collaborate with other entities could be limited. Potential collaborators or licensors may reject collaborations with us based upon their assessment of our financial, regulatory or intellectual property position or other factors. Even if we successfully establish new collaborations, these relationships may never result in the successful commercialization of any product or service. In addition, the success of the projects that require collaboration with third parties will be dependent on the continued success of such collaborators. There is no guarantee that our collaborators will continue to be successful and, as a result, we may expend considerable time and resources developing products or services that will not ultimately be commercialized.

We may be subject to substantial costs and liability, or be prevented from using technologies incorporated in our screening or diagnostic tests, as a result of litigation or other proceedings relating to patent or other intellectual property rights.

Third parties may assert infringement or other intellectual property claims against our licensors, our licensees, our suppliers, our strategic partners or us. We pursue a patent strategy that we believe provides us with a competitive advantage in the non-invasive early detection of cancer and pre-cancer, as well as in the guidance of cancer treatment decisions, and is designed to maximize our patent protection against third parties. We have filed patent applications that we believe cover the methods we have designed and used in our Cologuard test to detect colorectal cancer and pre-cancer, our Oncotype DX tests to provide prognosis and guide treatment decisions, and for pipeline cancer tests still in development. In order to protect or enforce our patent and other intellectual property rights, we may have to initiate actions against third parties. Any actions regarding patents could be costly and time-consuming and divert the attention of our management and key personnel from our
business. Additionally, such actions could result in challenges to the validity, enforceability, or applicability of our patents. Because the U.S. Patent & Trademark Office maintains patent applications in secrecy until a patent application publishes or the patent is issued, we have no way of knowing if others may have filed patent applications covering technologies used by us or our partners. Additionally, there may be third-party patents, patent applications and other intellectual property relevant to our technologies that may block or compete with our technologies. From time to time we have received correspondence from third parties alleging to hold intellectual property rights that could block our development or commercialization of products. While none of these inquiries to date have had any material effect on us, we may receive inquiries in the future that could have a material effect on our business. Even if third-party claims are without merit, defending a lawsuit may result in substantial expense to us and may divert the attention of management and key personnel. In addition, we cannot provide assurance that we would prevail in any such suits to the extent necessary to conduct our business according to our strategic plan or that the damages or other remedies, if any, awarded against us would not be substantial. Claims of intellectual property infringement may require that we, or our strategic partners, enter into royalty or license agreements with third parties that may only be available on unacceptable terms, if at all. These claims may also result in injunctions against the further development and commercial sale of services or products containing our technologies, which would have a material adverse effect on our business, financial condition and results of operations.

Also, patents and patent applications owned by us may become the subject of interference proceedings in the U.S. Patent and Trademark Office to determine priority of invention, which could result in substantial cost to us as well as a possible adverse decision as to the priority of invention of the patent or patent application involved. An adverse decision in an interference proceeding may result in the loss of rights under a patent or patent application subject to such a proceeding.

If we are unable to protect or enforce our intellectual property effectively, we may be unable to prevent third parties from using our intellectual property, which would impair any competitive advantage we may otherwise have.

We rely on patent protection as well as a combination of trademark, copyright and trade secret protection and other contractual restrictions to protect our proprietary technologies and other intellectual property rights, all of which provide limited protection and may not adequately protect our rights or permit us to gain or keep any competitive advantage. If we fail to protect our intellectual property, third parties may be able to compete more effectively against us and we may incur substantial litigation costs in our attempts to recover or restrict use of our intellectual property, which may not be entirely successful, if at all. Additionally, certain of our patents began to expire in 2018. This loss of intellectual property protection may permit third parties to use certain intellectual property assets previously exclusively reserved for our use.

We cannot assure you that any of our currently pending or future patent applications will result in issued patents, and we cannot predict how long it will take for any such patents to be issued. Further, we cannot assure you that other parties will not challenge any patents issued to us or that courts or regulatory agencies will hold our patents to be valid or enforceable. We have been in the past, and may be in the future, the subject of opposition proceedings relating to our patents. We cannot guarantee that we will be successful in defending challenges made against our patents and patent applications. Any successful third-party challenge to our patents could result in co-ownership of such patents with the third party or the unenforceability or invalidity of such patents. Furthermore, in the life sciences field, courts frequently render opinions that may affect the patentability of certain inventions or discoveries, including opinions that may affect the patentability of isolated DNA and/or methods for analyzing or comparing DNA. Such decisions may adversely impact our ability to obtain new patents and facilitate third-party challenges to our existing patents.

Even where we have valid patents, third parties may be able to successfully design their products and services around those patents, such that their products and services do not infringe our patents. We may face competition internationally in jurisdictions where we do not have intellectual property protection. Our business may be adversely affected to the extent third parties are able to develop or commercialize competing products and services that do not infringe our patents. We may also be adversely affected to the extent third parties develop or commercialize competing products or services in countries where we did not apply for patents, where our patents have not issued or where our intellectual property rights are not recognized.

We depend on trademarks to establish a market identity for our company and our products and services. To maintain the value of our trademarks, we may have to file lawsuits against third parties to prevent them from using trademarks confusingly similar to or dilutive of our registered or unregistered trademarks. We also may not obtain registrations for our pending or future trademark applications, and might have to defend our registered trademarks and pending applications from challenges by third parties. Enforcing or defending our registered and unregistered trademarks might result in significant litigation costs and, if we are unsuccessful, might result in damages, including the inability to continue using certain trademarks.
If patent regulations or standards are modified, such changes could have a negative impact on our business.

From time to time, the U.S. Supreme Court, other federal courts, the U.S. Congress or the USPTO may change the standards of patentability and validity of patents within the cancer screening and diagnostics space, and any such changes could have a negative impact on our business.

There have been several cases involving “gene patents” and diagnostic claims that have been considered by the U.S. Supreme Court. In March 2012, the Supreme Court in Mayo Collaborative Services v. Prometheus Laboratories, Inc, found a patented diagnostic method claim unpatentable because the relationship between a metabolite concentration and optimized dosage was a patent-ineligible “law of nature.” In June 2013, the Supreme Court ruled in ACLU v. Myriad Genetics, Inc, that an isolated genomic DNA sequence is not patent eligible while cDNA is eligible. The Prometheus and Myriad decisions, as well as subsequent case law, affect the legal concept of subject matter eligibility by seemingly narrowing the scope of the statute defining patentable inventions.

In December 2014 and again in 2019, the USPTO published revised guidelines for patent examiners to apply when examining process claims for patent eligibility in view of several recent Supreme Court decisions, including Mayo, Association for Molecular Pathology v. Myriad Genetics, Inc., and Alice Corporation Pty. Ltd. v. CLS Bank International, and others. The guidance indicates that claims directed to a law of nature, a natural phenomenon, or an abstract idea that do not meet the eligibility requirements should be rejected as non-statutory, patent ineligible subject matter. While these guidelines may be subject to review and modification by the USPTO over time, we cannot assure you that our patent portfolio will not be negatively impacted by the decisions described above, rulings in other cases or changes in guidance or procedures issued by the USPTO.

Additional substantive changes to patent law, whether new or associated with the America Invents Act — which substantially revised the U.S. patent system — may affect our ability to obtain, enforce or defend our patents. Accordingly, it is not clear what, if any, impact these substantive changes will ultimately have on the cost of prosecuting our patent applications, our ability to obtain patents based on our discoveries and our ability to enforce or defend our issued patents, all of which could have a material adverse effect on our business.

Risks Relating to our Common Stock

While we believe we currently have adequate internal control over financial reporting, we are required to assess our internal control over financial reporting on an annual basis and any future adverse results from such assessment could result in a loss of investor confidence in our financial reports and have an adverse effect on our stock price.

Pursuant to the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated by the SEC, we are required to furnish in our Form 10-K a report by our management regarding the effectiveness of our internal control over financial reporting. The report includes, among other things, an assessment of the effectiveness of our internal control over financial reporting as of the end of our fiscal year, including a statement as to whether our internal control over financial reporting is effective. This assessment must include disclosure of any material weaknesses in our internal control over financial reporting identified by management. While we believe our internal control over financial reporting is currently effective, the effectiveness of our internal controls in future periods is subject to the risk that our controls may become inadequate because of changes in conditions. Moreover, as described further in Item 9A – Controls and Procedures, in accordance with SEC staff guidance, we have excluded the business of Genomic Health, Inc. we acquired in November 2019 from the assessment of the effectiveness of our internal control over financial reporting as of December 31, 2019 contained in this Annual Report on Form 10-K, and it is therefore possible we will later determine that corrective action is needed to ensure the effectiveness of the internal control over financial reporting for this acquired business. Establishing, testing and maintaining an effective system of internal control over financial reporting requires significant resources and time commitments on the part of our management and our finance staff, may require additional staffing and infrastructure investments and would increase our costs of doing business. If we are unable to assert that our internal control over financial reporting is effective in any future period (or if our auditors are unable to express an opinion on the effectiveness of our internal controls or conclude that our internal controls are ineffective), we could lose investor confidence in the accuracy and completeness of our financial reports, which could have an adverse effect on our stock price.
We face risks associated with currency exchange rate fluctuations, which could adversely affect our operating results.

As a result of our international operations, we receive a portion of our revenues and pay a portion of our expenses in currencies other than the U.S. dollar, such as the Euro, the Swiss franc, the British pound and the Canadian dollar. As a result, we are at risk from exchange rate fluctuations between such foreign currencies and the U.S. dollar, which could adversely affect our results of operations. Additionally, the volume of our international orders may be negatively impacted by a strong U.S. dollar. For the three months ended December 31, 2019, approximately 3.9% of our revenues came from foreign denominated currencies. If the U.S. dollar strengthens against foreign currencies, the translation of these foreign currency denominated transactions will result in decreased revenues and operating expenses. We may not be able to offset adverse foreign currency impact with increased revenues. We enter into forward contracts to mitigate the impact of adverse movements in foreign exchange rates related to the re-measurement of monetary assets and liabilities and hedge our foreign currency exchange rate exposure. Even with this strategy in place to mitigate balance sheet foreign currency risk, we will not eliminate our exposure to foreign exchange rate fluctuations on our financial results.

Delaware law, our charter and bylaw documents and certain provisions of our convertible notes could impede or discourage a takeover or change of control that stockholders may consider favorable.

As a Delaware corporation, we are subject to certain anti-takeover provisions. Under Delaware law, a corporation may not engage in a business combination with any holder of 15 percent or more of its capital stock unless the holder has held the stock for three years or, among other things, the board of directors has approved the transaction. Accordingly, our board of directors could rely on Delaware law to prevent or delay an acquisition of our company. In addition, certain provisions of our certificate of incorporation and bylaws may have the effect of delaying or preventing a change of control or changes in our management. These provisions include the following:

- Our board of directors is divided into three classes serving staggered three-year terms.
- Only our board of directors can fill vacancies on the board.
- Our stockholders may not act by written consent.
- There are various limitations on persons authorized to call a special meeting of stockholders and advance notice requirements for stockholders to make nominations of candidates for election as directors or to bring matters before an annual meeting of stockholders.
- Our board of directors may issue, without stockholder approval, shares of undesignated preferred stock.

These types of provisions could make it more difficult for a third party to acquire control of us, even if the acquisition would be beneficial to our stockholders.

Certain provisions of the convertible notes we issued in 2018 and 2019 could make it more difficult or more expensive for a third party to acquire us. Upon the occurrence of certain transactions constituting a “fundamental change,” as such term is defined in the indenture for the notes, holders of the convertible notes will have the right, at their option, to require us to repurchase all of their convertible notes or any portion of the principal amount of such convertible notes in integral multiples of $1,000. We may also be required to increase the conversion rate in the event of a “make-whole fundamental change,” as such term is defined in the indenture for the notes. In addition, the indenture and the convertible notes will prohibit us from engaging in certain mergers or acquisitions unless, among other things, the surviving entity assumes our obligations under the convertible notes and the indenture. These and other provisions in the indenture could deter or prevent a third party from acquiring us.
Our bylaws provide, subject to certain exceptions, that the Court of Chancery of the State of Delaware will be the sole and exclusive forum for certain stockholder litigation matters, which could limit our stockholders’ ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our bylaws provide, subject to limited exceptions, that the Court of Chancery of the State of Delaware will, to the fullest extent permitted by law, be the sole and exclusive forum for any claims, including any derivative actions or proceedings brought on our behalf, (1) that are based upon a violation of a duty by a current or former director or officer or stockholder in such capacity or (2) that may be brought in the Court of Chancery pursuant to the Delaware General Corporation Law. Any person or entity purchasing or otherwise acquiring any interest in shares of our common stock shall be deemed to have notice of and to have consented to the provisions of our bylaws described above. This choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or any of our directors, officers, employees or stockholders which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision that is contained in our bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect our business, financial condition and results of operations.

Our ability to use our net operating losses to offset future taxable income may be subject to certain limitations.

As of December 31, 2019, we had federal, state, and foreign net operating loss carryforwards (“NOLs”) of approximately $1,548.4 million, $672.7 million, and $18.1 million, respectively. In general, under Section 382 of the Internal Revenue Code of 1986, as amended (the “Code”), a corporation that undergoes an “ownership change” is subject to limitations on its ability to utilize its pre-change NOLs to offset future taxable income. An ownership change is generally defined as a greater than 50 percent change in equity ownership by value over a specified time period (generally three years). Given the Code’s broad definition, an ownership change could be the unintended consequence of otherwise normal market trading in our stock that is outside our control. An ownership change under Section 382 of the Code could also be triggered by certain strategic transactions. Additionally, tax law limitations may result in our NOLs expiring before we have the ability to use them. Pursuant to the Tax Cuts and Jobs Act (H.R. 1) of 2017, federal NOLs arising in tax years beginning after December 31, 2017 have an indefinite carryover period and may only be used to offset 80 percent of current year taxable income. For these reasons, even if we attain profitability, our ability to utilize our NOLs may be limited, potentially significantly so.

Our stock price has fluctuated widely and is likely to continue to be volatile.

The market price for our common stock varied between a high of $123.99 and a low of $60.95 in the twelve-month period ended December 31, 2019. Our stock price is likely to continue to be volatile and subject to significant price and volume fluctuations in response to market and other factors, including those listed in this “Item 1A. Risk Factors” section and other, unknown factors. Among numerous other factors, our stock price also may be affected by:

- comments by securities analysts regarding our business or prospects;
- our quarterly operating performance;
- our issuance of common stock or other securities;
- our inability to accurately forecast future performance;
- our inability to meet analysts’ expectations;
- our entering into merger, acquisition or other similar transactions;
- general fluctuations in the stock market or in the stock prices of companies in the life sciences or healthcare diagnostics industries; and
- general conditions and publicity regarding the life sciences or healthcare diagnostics industries.

Consequently, the current market price of our common stock may not be indicative of future market prices, and we may be unable to sustain or increase the value of an investment in our common stock. Further, sharp drops in the market price of our common stock, such as we experienced at certain times in our history, may expose us to securities class-action litigation. Such litigation could result in substantial expenses and diversion of management’s attention and corporate resources, which would seriously harm our business, financial condition, and results of operations.
We have never paid cash dividends and do not intend to do so.

We have never declared or paid cash dividends on our common stock. We currently plan to use any cash proceeds from our operations to finance the growth of our business rather than to pay cash dividends. Payments of any cash dividends in the future will depend on our financial condition, results of operations and capital requirements, as well as other factors deemed relevant by our board of directors.

Our balance sheet includes significant amounts of goodwill and intangible assets. The impairment of a significant portion of these assets would negatively affect our results of operations.

Our balance sheet includes goodwill and intangible assets that represent 67% of our total assets at December 31, 2019. These assets consist primarily of goodwill and identified intangible assets associated with our acquisitions. On at least an annual basis, we assess whether there have been impairments in the carrying value of goodwill. In addition, we review intangible assets for impairment whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable. If the carrying value of the asset is determined to be impaired, then it is written down to fair value by a charge to operating earnings. An impairment of a significant portion of goodwill or intangible assets could have a material negative effect on our results of operations.

Our management has broad discretion over the use of our available cash and marketable securities and might not spend available cash and marketable securities in ways that increase the value of your investment.

From time to time we may carry high levels of cash and marketable securities. As of September 30, 2019, we had $1.2 billion in combined cash and marketable securities. After completing the combination with Genomic Health, our combined cash and marketable securities fell to $324 million as of December 31, 2019. Our management currently expects to deploy our cash and marketable securities primarily to expand our Cologuard and Oncotype DX operations and commercialization activities, to fund our product development efforts and for general corporate purposes, including working capital and possible acquisitions. However, our management has broad discretion to pursue other objectives, we may raise additional capital, and we may use our current and future resources for other purposes. Our management might not effectively deploy our cash and marketable securities which could have an adverse effect on our business.

Our indebtedness could adversely affect our business, financial condition and results of operations and our ability to meet our payment obligations under such indebtedness.

Pursuant to the convertible note offerings we completed in 2018 and 2019, we incurred $1.2 billion of indebtedness, and we have a construction loan outstanding of $25.0 million as of December 31, 2019. This level of debt could have significant consequences on our future operations, including:

- increasing our vulnerability to adverse economic and industry conditions;
- making it more difficult for us to meet our payment and other obligations;
- making it more difficult to obtain any necessary future financing for working capital, capital expenditures, debt service requirements or other purposes;
- requiring the dedication of a substantial portion of any cash flow from operations to service our indebtedness, thereby reducing the amount of cash flow available for other purposes, including capital expenditures;
- placing us at a possible competitive disadvantage with competitors that are less leveraged than us or have better access to capital than we have; and
- limiting our flexibility in planning for, or reacting to, changes in our business and the markets in which we compete.

Any of the above-listed factors could have an adverse effect on our business, financial condition and results of operations and our ability to meet our payment obligations under the convertible notes.
Our ability to meet our payment and other obligations under the convertible notes depends on our ability to generate significant cash flow in the future. This, to some extent, is subject to general economic, financial, competitive, legislative and regulatory factors as well as other factors that are beyond our control. We cannot assure you that our business will generate cash flow from operations, or that future borrowings will be available to us, in an amount sufficient to enable us to meet our payment obligations under the convertible notes and to fund other liquidity needs. If we are not able to generate sufficient cash flow to service our debt obligations, we may need to refinance or restructure our debt, including the convertible notes, sell assets, reduce or delay capital investments, or seek to raise additional capital. If we are unable to implement one or more of these alternatives, we may not be able to meet our payment obligations under the convertible notes, and such a default could cause us to be in default on any other currently existing or future outstanding indebtedness.

_Servicing our debt will require a significant amount of cash, and we may not have sufficient cash flow from our business to pay amounts due under our indebtedness, including the convertible notes._

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, including the $1.2 billion aggregate principal amount of our 1.0% and 0.375% convertible senior notes due 2025 and 2027, respectively, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not generate cash flow from operations in the future sufficient to service our debt, including the convertible notes, and make necessary capital expenditures. If we are unable to generate such cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

**Item 1B. Unresolved Staff Comments**

None.

**Item 2. Properties**

As of December 31, 2019, we occupied approximately 851,000 square feet of space at our significant facilities in the Madison, Wisconsin area and 204,000 square feet in our facilities in Redwood City, California. See Note 6 in the Notes to Consolidated Financial Statements included in Part II, Item 8, “Consolidated Financial Statements and Supplementary Data” for further discussion surrounding our leased facilities and Note 8 in the Notes to our Consolidated Financial Statements for further discussion surrounding mortgages on our owned properties.

As of December 31, 2019, our material facilities are as follows:

<table>
<thead>
<tr>
<th>Location</th>
<th>Primary Function</th>
<th>Total Square Feet (approx.)</th>
<th>Leased or Owned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Madison, Wisconsin</td>
<td>Research and development, corporate, operations and clinical laboratory</td>
<td>851,000</td>
<td>Leased/Owne</td>
</tr>
<tr>
<td>Redwood City, California</td>
<td>Research and development, corporate, operations and clinical laboratory</td>
<td>204,000</td>
<td>Leased</td>
</tr>
</tbody>
</table>

**Item 3. Legal Proceedings**

From time to time we are a party to various legal proceedings arising in the ordinary course of our business. Legal proceedings, including litigation, government investigations and enforcement actions could result in material costs, occupy significant management resources and entail civil and criminal penalties.
The United States Department of Justice (“DOJ”) is investigating Genomic Health's compliance with the Medicare Date of Service billing regulation. In March 2017, Genomic Health received a civil investigative demand (“CID”) from the U.S. Attorney's Office for the Eastern District of New York in connection with this matter and has produced specific documents in response to the CID. In July 2019 and January 2020, Genomic Health received additional subpoenas from the DOJ related to this inquiry and we are cooperating with those requests. An adverse outcome could include our being required to pay treble damages, incur civil and criminal penalties, paying attorneys' fees, entering into a corporate integrity agreement, being excluded from participation in government healthcare programs, including Medicare and Medicaid, and other adverse actions that could materially and adversely affect our business, financial condition and results of operations.

Item 4. Mine Safety Disclosures

Not applicable.
PART II

Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is currently listed on the NASDAQ Capital Market under the symbol “EXAS.”

As of February 19, 2020, there were 147,967,507 shares of our common stock outstanding held by approximately 104 holders of record.

We have never paid any cash dividends on our common stock and do not plan to pay any cash dividends in the foreseeable future.

Item 6. Selected Financial Data

The selected historical financial data for the five years ended December 31, 2019 is derived from our audited consolidated financial statements. The selected historical financial data should be read in conjunction with, and is qualified by reference to “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” and our consolidated financial statements and notes thereto.

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2019 (1)</th>
<th>2018</th>
<th>2017</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Statements of Operations Data:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revenue:</td>
<td>$876,293</td>
<td>$454,462</td>
<td>$265,989</td>
<td>$99,376</td>
<td>$39,437</td>
</tr>
<tr>
<td>Loss from operations</td>
<td>(233,782)</td>
<td>(159,471)</td>
<td>(118,310)</td>
<td>(169,016)</td>
<td>(159,068)</td>
</tr>
<tr>
<td>Net loss before tax</td>
<td>(268,851)</td>
<td>(175,057)</td>
<td>(114,584)</td>
<td>(167,211)</td>
<td>(157,803)</td>
</tr>
<tr>
<td>Net loss</td>
<td>(83,993)</td>
<td>(175,149)</td>
<td>(114,397)</td>
<td>(167,211)</td>
<td>(157,803)</td>
</tr>
<tr>
<td>Net loss per share—basic and diluted</td>
<td>(0.64)</td>
<td>(1.43)</td>
<td>(0.99)</td>
<td>(1.63)</td>
<td>(1.71)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Balance Sheet Data:</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>3,505,768</td>
<td>1,524,022</td>
<td>598,560</td>
<td>377,040</td>
<td>364,030</td>
</tr>
<tr>
<td>Long-term liabilities</td>
<td>981,213</td>
<td>706,912</td>
<td>10,018</td>
<td>11,053</td>
<td>10,451</td>
</tr>
</tbody>
</table>

(1) On November 8, 2019, we completed our combination with Genomic Health, Inc. The results of Genomic Health have been included in our results from the date of combination.
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of our financial condition and results of operations should be read in conjunction with the consolidated financial statements and the related notes thereto included elsewhere in this Annual Report on Form 10-K. We have omitted discussion of 2017 results where it would be redundant to the discussion previously included in Management's Discussion and Analysis of Financial Condition and Results of Operations on Form 10-K for the year ended December 31, 2018, which has been filed with the SEC.

Overview

Exact Sciences Corporation (together with its subsidiaries, “Exact,” “we,” “us,” “our” or the “Company”) is a leading global cancer diagnostics company. We have developed some of the most impactful brands in cancer diagnostics, and we are currently working on the development of additional tests for other types of cancer, with the goal of bringing new innovative cancer tests to patients throughout the world.

On November 8, 2019, we completed the combination with Genomic Health, Inc. (“Genomic Health”), a leading provider of genomic-based diagnostic tests that help to optimize cancer care, and its Oncotype IQ Genomic Intelligence Platform comprised of its flagship line of Oncotype DX gene expression tests.

Our Clinical Laboratory and Manufacturing Facilities

We process our Cologuard test at two state-of-the-art, highly automated lab facilities in Madison, Wisconsin that are certified pursuant to federal Clinical Laboratory Improvement Amendments (“CLIA”) and College of American Pathologists (“CAP”) requirements to process Cologuard tests and provide patient results. Our total lab capacity at both facilities is approximately seven million Cologuard tests per year, with the opportunity to add additional capacity, if needed.

We currently manufacture the Cologuard test in a facility in Madison, Wisconsin. As we expand the commercialization of Cologuard, we believe it will be necessary to expand our manufacturing capacity. Accordingly, we are in the process of building an additional manufacturing facility which we expect to receive FDA approval for commercial production in 2020. We are committed to manufacturing and providing medical devices and related products that meet customer expectations and applicable regulatory requirements. We adhere to manufacturing and safety standards required by federal, state, and local laws and regulations and operate our manufacturing facilities under a quality management system. We purchase certain components for our Cologuard test from third-party suppliers and manufacturers.

All internally developed Oncotype DX tests for domestic and international patients are currently processed in our clinical reference laboratory facilities in Redwood City, California, which is accredited under CLIA, and certified by CAP. The Oncotype DX AR-V7 Nucleus Detect test, which was designed and validated by Epic Sciences, Inc. (“Epic Sciences”), is performed in its CLIA-accredited, CAP-certified clinical reference laboratory facility in San Diego, California. Our current clinical laboratory processing capacity in Redwood City is approximately 175,000 tests annually, and it has significant expansion capacity with incremental increases in laboratory personnel and equipment, including expansion capacity for laboratory facilities. We believe that we currently have sufficient capacity to process all of our tests. We have recently completed the construction of an additional laboratory facility on our Redwood City, California campus that will increase capacity for sample processing and research and development. We may require additional facilities in the future as we expand our business and believe that additional space, when needed, will be available on commercially reasonable terms.
How We Recognize Revenue

We recognize revenue on the delivery of a test result to an ordering healthcare provider for tests performed based on our estimate of the amount that we will ultimately collect at the time delivery is complete. The amount of revenue we recognize is based on the established billing rates less contractual and other adjustments, which yields the constrained amount that we expect to ultimately collect. We determine the amount we expect to ultimately collect on a per-payer or per-agreement basis, using historical collections, established reimbursement rates and other adjustments. The expected amount is typically lower than, if applicable, the agreed-upon reimbursement amount due to several factors, such as the amount of any patient co-payments, out-of-network payers, the existence of secondary payers and claim denials. Upon ultimate collection, the aggregate amount received from payers and patients, where reimbursement was estimated, is compared to previous collection estimates and, if necessary, the contractual allowance is adjusted. Finally, should we later determine the judgments underlying estimated collections change, our financial results could be negatively impacted in future quarters.

Acquisitions

On November 8, 2019, we completed the combination with Genomic Health, a leading provider of genomic-based diagnostic tests that help to optimize cancer care. As part of the combination, we acquired all of the outstanding equity interest of the company for an aggregate purchase price of $2.5 billion through a combination of cash and equity.

2020 Priorities

Our top priorities for 2020 are to (1) deliver more answers, (2) enhance customer experience, and (3) power new growth.

Deliver More Answers

We want to focus on growing the Cologuard and Oncotype DX brands in order to impact more patients’ lives. We are also looking for potential opportunities for lowering the cost of providing Cologuard and Oncotype DX.

Enhance Customer Experience

Another priority for 2020 is to improve customer satisfaction. In addition, we are evaluating ways that we can grow patient compliance and re-screening rates with Cologuard, including ways that we might make Cologuard even easier for patients to use.

We are also seeking opportunities to increase the electronic order rate for our tests, as well as simplify the claims process.

Power New Growth

We launched the BLUE-C study, a multi-center, prospective study, at the end of 2019 and are currently enrolling patients, 40 years of age and older who are scheduled for a colorectal cancer (“CRC”) screening colonoscopy. The study is part of an effort to increase specificity of Cologuard, while maintaining its high level of sensitivity. The launch of this study comes after promising research from our collaboration with Mayo Foundation for Medical Education and Research (“Mayo”) identified new methylation and protein markers to detect colorectal cancer and advanced adenomas with high accuracy. We expect to complete this study in 2021. We cannot be certain that this study will be successful or lead to commercially successful improvements to Cologuard or new products.

We are also continuing to focus our research and development efforts on building a pipeline of potential future products and services with a focus on blood or other fluid-based ("liquid biopsy") tests. We will continue to advance liquid biopsy through biomarker discovery and validation in tissue, blood, or other fluids. We have identified proprietary biomarkers for several cancers, including liver cancer and pancreatic cancer. Through our collaboration with Mayo, we have successfully performed validation studies on tissue, blood, or other fluid samples for many of the deadliest cancers.

We are currently seeking to develop a blood-based biomarker test to serve as an alternative to ultrasound and AFP for use in hepatocellular carcinoma ("HCC") testing. HCC is the most common type of liver cancer. Our goal is to develop a patient-friendly test that performs better than the current standard of care. We are finalizing our HCC test development and plan to make the test available in the second half of 2020.
The American Cancer Society ("ACS") estimates that liver cancer will be diagnosed in 43,000 Americans and cause 30,000 deaths in 2020, approximately 90 percent of which will be hepatocellular carcinoma ("HCC"). Incidence and mortality rates are both increasing at approximately 3 percent per year. People who have been diagnosed with cirrhosis of the liver or Hepatitis B are at high risk of developing HCC. Evidence shows that HCC testing in these high-risk groups leads to earlier detection and improved outcomes. The National Comprehensive Cancer Network ("NCCN") and American Association for the Study of Liver Diseases ("AASLD") guidelines recommend that these two groups be tested for HCC every six months using ultrasound and the blood-based biomarker alpha-fetoprotein ("AFP"). However, ultrasound and AFP are documented to have poor sensitivity for early stage cancer, which is the primary target of testing.

In November 2019, we released the results of a 443-patient study which demonstrated 80% sensitivity at 90% specificity with a novel combination of six blood-based biomarkers for HCC. The study also showed 71% sensitivity for early-stage HCC at 90% specificity. The study compared performance to the AFP test, which demonstrated 45% sensitivity at 90% specificity for early-stage HCC. Our HCC test has been granted Breakthrough Device designation by the FDA. The agency’s Breakthrough Devices program expedites development, assessment, and review processes to provide patients and healthcare providers with timely access to new technologies.

We are also focusing on next generation technologies. When the presence of tumor-derived DNA in blood or urine is high and persists or increases over time, the cancer is likely growing and a new course of treatment may be appropriate. We plan on monitoring this tumor-derived DNA through a variety of technologies to expand our focus beyond early-stage treatment decision support toward patients with later-stage disease to help guide therapeutic choices, monitor progression and response to therapeutics, and monitor disease recurrence. We may pursue additional research and development opportunities and leverage our existing and future collaborations using other analytes such as circulating tumor cells ("CTCs"), RNA, and proteins. Additionally, we may also use a number of other technologies across our various development programs and to implement our products. While early-stage cancer continues to be our main focus, we believe we also have an opportunity to expand our business further along the patient’s cancer journey, both through our research and development process and strategic collaborations.

**Results of Operations**

Our top priorities for 2019 were to (1) power the partnership by executing on the Pfizer partnership in order to grow the Cologuard brand and get more patients screened, (2) enhance Cologuard through expansion of Cologuard's indication to people between the ages of 45 and 49 who are at average risk for colorectal cancer, and seek opportunities to improve upon Cologuard's performance characteristics, and (3) advance liquid biopsy through biomarker discovery and validation in tissue, blood, or other fluids.

During 2019, we generated total revenue of $876.3 million compared to $454.5 million in 2018. In 2019, we completed approximately 1.7 million Cologuard tests, and generated $810.1 million of screening revenue compared to 2018 when we completed 0.9 million tests and generated $454.5 million of screening revenue. The increase in revenues and tests completed from the prior year was primarily driven by sales force execution, our patient advertising campaign, and our partnership with Pfizer. As of December 31, 2019, approximately 197,000 healthcare providers have ordered Cologuard compared to approximately 147,000 healthcare providers as of December 31, 2018. Subsequent to the combination with Genomic Health, we completed approximately 23,000 Oncotype DX tests and generated $66.2 million of laboratory service revenue from global Oncotype DX products.

During 2019, we made investments in our technical systems, lab capacity, and our sales force in order to enhance our infrastructure and position our operations and processes for continued growth. Additionally, we continued to focus on cost containment throughout the business which, along with the increase in test volume, helped drive improvements in our gross margin.

In 2019, we continued to invest in research and development and focused on the development of additional cancer tests as outlined in the “Power New Growth” section above. We also obtained FDA approval to expand Cologuard's indication to include individuals between the ages of 45 and 49 who are at average risk for colorectal cancer.
In order to support the commercialization of Cologuard and to achieve our goals for 2019, our selling, general, and administrative costs increased by $310.3 million during the year. In addition, our efforts in 2019 to develop our pipeline products and improvements to Cologuard led to an increase in research and development costs of $72.4 million during the year. We ensured that we were well capitalized to meet our future goals by raising $729.5 million, net of issuance costs, through an underwritten public offering of convertible notes completed in March 2019 and finished the year with $323.7 million in cash, cash equivalents, and marketable securities.

Comparison of the years ended December 31, 2019 and 2018

**Revenue.** Our revenue is primarily generated by our laboratory testing services, from our Cologuard and Oncotype DX tests. For the years ended December 31, 2019 and 2018, we generated screening revenue of $810.1 million and $454.5 million, respectively. Screening includes laboratory service revenue from Cologuard and revenue from Biomatrica products. The increase in revenue was primarily due to an increase in completed Cologuard tests during the current period. Subsequent to the combination with Genomic Health in November 2019, we generated precision oncology revenue of $66.2 million. Precision oncology includes laboratory service revenue from global Oncotype DX products.

**Our cost structure.** Our selling, general, and administrative expenses consist primarily of non-research personnel salaries, office expenses, professional fees, sales and marketing expenses incurred in support of our commercialization efforts and non-cash stock-based compensation.

Cost of sales includes costs related to inventory production and usage, shipment of collection kits and tissue samples, royalties and the cost of services to process tests and provide results to healthcare providers.

We expect that gross margin for our services will continue to fluctuate and be affected by the test volume of our products, our operating efficiencies, patient adherence rates, payer mix, the levels of reimbursement, and payment patterns of payers and patients.

**Cost of sales (exclusive of amortization of acquired intangibles).** Cost of sales increased to $216.7 million for the year ended December 31, 2019 from $116.6 million for the year ended December 31, 2018. The increase in cost of sales is primarily due to the increases in completed Cologuard and Oncotype DX tests.

<table>
<thead>
<tr>
<th>Amounts in millions</th>
<th>2019</th>
<th>2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production costs</td>
<td>$144.8</td>
<td>$81.4</td>
<td>$63.4</td>
</tr>
<tr>
<td>Personnel expenses</td>
<td>42.3</td>
<td>20.3</td>
<td>22.0</td>
</tr>
<tr>
<td>Facility and support services</td>
<td>21.8</td>
<td>11.1</td>
<td>10.7</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>5.8</td>
<td>3.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Other cost of sales expenses</td>
<td>2.0</td>
<td>0.3</td>
<td>1.7</td>
</tr>
<tr>
<td>Total cost of sales expense</td>
<td>$216.7</td>
<td>$116.6</td>
<td>$100.1</td>
</tr>
</tbody>
</table>

**Research and development expenses.** Research and development expenses increased to $139.7 million for the year ended December 31, 2019 compared to $67.3 million for the year ended December 31, 2018. The increase in research and development expenses was primarily due to an increase in direct research and development activities, which includes clinical studies, for our pipeline and improvements to Cologuard, as well as personnel costs due to increased headcount.

<table>
<thead>
<tr>
<th>Amounts in millions</th>
<th>2019</th>
<th>2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct research and development expenses</td>
<td>$69.9</td>
<td>$30.5</td>
<td>$39.4</td>
</tr>
<tr>
<td>Personnel expenses</td>
<td>37.0</td>
<td>19.3</td>
<td>17.7</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>17.2</td>
<td>10.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Other research and development expenses</td>
<td>10.8</td>
<td>4.2</td>
<td>6.6</td>
</tr>
<tr>
<td>Professional and legal fees</td>
<td>4.8</td>
<td>3.1</td>
<td>1.7</td>
</tr>
<tr>
<td>Total research and development expenses</td>
<td>$139.7</td>
<td>$67.3</td>
<td>$72.4</td>
</tr>
</tbody>
</table>
General and administrative expenses. General and administrative expenses increased to $352.5 million for the year ended December 31, 2019 compared to $178.0 million for the year ended December 31, 2018. The increase in general and administrative expenses was primarily to support the overall growth of the Company. In addition, we incurred $62.8 million in acquisition and integration related costs as part of our combination with Genomic Health.

<table>
<thead>
<tr>
<th>Amounts in millions</th>
<th>2019</th>
<th>2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel expenses</td>
<td>$136.5</td>
<td>$67.8</td>
<td>$68.7</td>
</tr>
<tr>
<td>Professional and legal fees</td>
<td>85.3</td>
<td>30.9</td>
<td>54.4</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>64.2</td>
<td>34.4</td>
<td>29.8</td>
</tr>
<tr>
<td>Facility and support services</td>
<td>62.6</td>
<td>37.6</td>
<td>25.0</td>
</tr>
<tr>
<td>Other general and administrative</td>
<td>3.9</td>
<td>7.3</td>
<td>(3.4)</td>
</tr>
<tr>
<td>Total general and administrative expenses</td>
<td>$352.5</td>
<td>$178.0</td>
<td>$174.5</td>
</tr>
</tbody>
</table>

Sales and marketing expenses. Sales and marketing expenses increased to $385.2 million for the year ended December 31, 2019 compared to $249.4 million for the year ended December 31, 2018. The increase in sales and marketing expenses was a result of hiring additional sales and marketing personnel, increasing our advertising and patient marketing efforts for our tests, and expenses incurred related to our Promotion Agreement with Pfizer as further described in Note 3 of our consolidated financial statements.

<table>
<thead>
<tr>
<th>Amounts in millions</th>
<th>2019</th>
<th>2018</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct marketing costs and professional fees</td>
<td>$184.6</td>
<td>$127.7</td>
<td>$56.9</td>
</tr>
<tr>
<td>Personnel expenses</td>
<td>166.7</td>
<td>105.6</td>
<td>61.1</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>21.3</td>
<td>12.4</td>
<td>8.9</td>
</tr>
<tr>
<td>Other sales and marketing expenses</td>
<td>12.6</td>
<td>3.7</td>
<td>8.9</td>
</tr>
<tr>
<td>Total sales and marketing expenses</td>
<td>$385.2</td>
<td>$249.4</td>
<td>$135.8</td>
</tr>
</tbody>
</table>

Amortization of acquired intangibles. Amortization of acquired intangibles increased to $16.0 million for the year ended December 31, 2019 compared to $2.5 million for the year ended December 31, 2018. This increase in amortization was due to the Genomic Health combination.

Investment income. Investment income increased to $26.5 million for the year ended December 31, 2019 compared to $21.2 million for the year ended December 31, 2018. This increase in investment income was due to realized gains generated from the sale of marketable securities and an increase in the average rate of return on investments due to an increase in market interest rates for the year ended December 31, 2019 when compared to the same period in 2018.

Interest expense. Net interest expense increased to $61.6 million for the year ended December 31, 2019 compared to $36.8 million for the year ended December 31, 2018. Interest expense recorded from our outstanding convertible notes totaled $49.6 million and $36.4 million for the years ended December 31, 2019 and 2018, respectively. In addition to the $49.6 million in interest expense recorded on outstanding convertible notes, an additional $10.6 million was recorded as a result of the settlement of convertible notes, as further described in Note 9 of our consolidated financial statements included in this Annual Report. Of the $49.6 million and $36.4 million in interest expense recorded on outstanding convertible notes, $42.3 million and $28.6 million of interest expense relates to amortization of debt discount and debt issuance costs for the years ended December 31, 2019 and 2018, respectively. The remaining $8.8 million and $8.2 million of interest expense for the years ended December 31, 2019 and 2018, respectively, relates to the stated interest that was paid in cash during the years on our outstanding convertible notes and construction loan.

Income tax benefit (expense). Income tax benefit increased to $184.9 million for the year ended December 31, 2019 compared to an expense of $0.1 million for the year ended December 31, 2018. This increase in income tax benefit is primarily due to an income tax benefit of $185.1 million recorded as a result of a change in deferred tax asset valuation allowance resulting from the Genomic Health combination.
Liquidity and Capital Resources

We have financed our operations since inception primarily through public offerings of our common stock and convertible debt and through revenue generated by the sale of Cologuard, and since the completion of our Genomic Health combination, of Oncotype DX tests. As of December 31, 2019, we had approximately $177.3 million in unrestricted cash and cash equivalents and approximately $146.4 million in marketable securities.

The majority of our investments in marketable securities consist of fixed income investments, and all are deemed available-for-sale. The objectives of this portfolio are to provide liquidity and safety of principal while striving to achieve the highest rate of return. Our investment policy limits investments to certain types of instruments issued by institutions with investment grade credit ratings and places restrictions on maturities and concentration by type and issuer.

Net cash used in operating activities was $115.0 million, $69.3 million, and $71.7 million for the years ended December 31, 2019, 2018 and 2017, respectively. The principal use of cash in operating activities for each of the years ended December 31, 2019, 2018 and 2017 was to fund our net loss.

Net cash used in investing activities was $121.1 million, $781.9 million, and $160.8 million for the years ended December 31, 2019, 2018, and 2017, respectively. The decrease in cash used in investing activities for the year ended December 31, 2019 when compared to the same period in 2018 and 2017 was primarily the result of the timing of purchases and maturities of marketable securities following our convertible debt offerings and our combination with Genomic Health. Excluding the impact of purchases and maturities of marketable securities, net cash used in investing activities was $1.1 billion, $168.6 million, and $75.2 million for the years ended December 31, 2019, 2018, and 2017, respectively. The increase in investing activities from 2018 to 2019, excluding the impact of purchases and maturities of marketable securities, was primarily due to the cash utilized for our combination with Genomic Health of $973.9 million and an increase in purchases of property and equipment during the year ended December 31, 2019 consisting primarily of increased laboratory equipment purchases, computer equipment and computer software purchases, and assets under construction in order to continue to scale-up our operations for future expected growth of our Cologuard business. Additionally, the increase for 2018 was driven by the acquisition of Biomatrica for $17.9 million compared to 2017 when we completed an acquisition of Sampleminded, Inc. (“Sampleminded”) for $3.0 million. The increase in investing activities from 2017 to 2018, excluding the impact of purchases and maturities of marketable securities was primarily due to an increase in purchases of property and equipment during the year ended December 31, 2018.

Net cash provided by financing activities was $253.2 million, $934.1 million, and $261.0 million for the years ended December 31, 2019, 2018, and 2017, respectively. During the year ended December 31, 2019, we received net cash of $729.5 million from the issuance of Convertible Notes with a maturity date of March 15, 2027 (the “2027 Notes”), and we used $493.4 million of cash to settle Convertible Notes with an original maturity date of January 15, 2025 (the “2025 Notes”, and collectively with the 2027 Notes, the “Notes”). The cash provided for the year ended December 31, 2018 was primarily the result of proceeds from our issuance of the 2025 Notes in January 2018 and June 2018. The cash provided for the year ended December 31, 2017 was primarily the result of proceeds from the sale of common stock of $253.4 million in 2017. In addition, during the year ended December 31, 2019, we received proceeds of $8.4 million from our employee stock purchase plan, $8.8 million from the exercise of stock options, $0.3 million from drawing on our construction loan, and made payments of $0.4 million for stock issuance costs.

We expect that cash and cash equivalents and marketable securities on hand at December 31, 2019 will be sufficient to fund our current operations for at least the next twelve months, based on current operating plans. However, we may need to raise additional capital to fully fund our current strategic plan, which includes successfully commercializing Cologuard and Oncotype DX and developing a pipeline of future products. Additionally, we may enter into transactions to acquire other businesses, products, services, or technologies as part of our strategic plan. If we are unable to obtain sufficient additional funds to enable us to fund our operations through the completion of such plan, our results of operations and financial condition would be materially adversely affected, and we may be required to delay the implementation of our plan and otherwise scale back our operations. Even if we successfully raise sufficient funds to complete our plan, we cannot assure that our business will ever generate sufficient cash flow from operations to become profitable.
The following table sets forth certain information concerning our obligations to make contractual future payments, such as pursuant to debt and lease agreements, as of December 31, 2019:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Total</th>
<th>Less Than One Year</th>
<th>1 - 3 Years</th>
<th>3 - 5 Years</th>
<th>More Than 5 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convertible notes (1)</td>
<td>$1,162,549</td>
<td>$—</td>
<td>$—</td>
<td>$—</td>
<td>$1,162,549</td>
</tr>
<tr>
<td>Long-term debt obligations (2)</td>
<td>25,000</td>
<td>834</td>
<td>24,166</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Other liabilities</td>
<td>19,243</td>
<td>1,196</td>
<td>3,297</td>
<td>3,136</td>
<td>11,614</td>
</tr>
<tr>
<td>Operating lease obligations (3)</td>
<td>179,549</td>
<td>15,966</td>
<td>34,117</td>
<td>37,614</td>
<td>91,852</td>
</tr>
<tr>
<td>Total</td>
<td>$1,386,341</td>
<td>$17,996</td>
<td>$61,580</td>
<td>$40,750</td>
<td>$1,266,015</td>
</tr>
</tbody>
</table>

(1) Senior convertible notes were issued in 2018 and 2019 and have maturity dates in 2025 and 2027, respectively. The table excludes expected interest payments related to the Notes. See Note 9 in the Notes to Consolidated Financial Statements for further information.

(2) Includes obligations associated with outstanding construction loan agreement. The table excludes expected interest payments related to long term debt obligations. See Note 8 in the Notes to Consolidated Financial Statements for further information.

(3) Operating leases reflect remaining obligations associated with the leased facilities at our headquarters, operations and lab facilities in Madison, Wisconsin, Redwood City, California, San Diego, California, and Salt Lake City, Utah. This also includes lease payments for equipment, vehicles, and other miscellaneous leases. See Note 6 and Note 8 in the Notes to Consolidated Financial Statements for further information.

(4) Contingent consideration and contingent license payments are excluded from this table as the amount and timing of such outflows cannot be reasonably determined. See Note 6 in the Notes to Consolidated Financial Statements for further information.

**Net Operating Loss Carryforwards**

As of December 31, 2019, we had federal, state, and foreign net operating loss carryforwards of approximately $1,548.4 million, $672.7 million, $18.1 million, respectively. We also had federal and state research tax credit carryforwards of approximately $39.1 million and $27.5 million, respectively. The net operating loss and tax credit carryforwards will expire at various dates through 2039, if not utilized. The Internal Revenue Code and applicable state laws impose substantial restrictions on a corporation’s utilization of net operating loss and tax credit carryforwards if an ownership change is deemed to have occurred. Additionally, tax law limitations may result in our NOLs expiring before we have the ability to use them. The Tax Cuts and Jobs Act (H.R. 1) of 2017 limit the deduction for NOLs to 80 percent of current year taxable income and provides for an indefinite carryover period for federal NOLs. Both provisions are applicable for losses arising in tax years beginning after December 31, 2017. As of December 31, 2019, we had $610.5 million of NOLs incurred after December 31, 2017. For these reasons, even if we attain profitability our ability to utilize our NOLs may be limited, potentially significantly so.
A valuation allowance is provided for deferred tax assets if it is more likely than not these items will either expire before we are able to realize their benefit, or that future deductibility is uncertain. In general, companies that have a history of operating losses are faced with a difficult burden of proof on their ability to generate sufficient future income in order to realize the benefit of the deferred tax assets. We have recorded a valuation against our deferred tax assets based on our history of losses and current uncertainty as to timing of future taxable income. Given the future limitations on and expiration of certain Federal and State deferred tax assets, the recording of a valuation allowance resulted in a deferred tax liability of approximately $20.4 million remaining at the end of 2019, which is included in other long-term liabilities on our consolidated balance sheet. The deferred tax assets are still available for us to use in the future to offset taxable income, which would result in the recognition of a tax benefit and a reduction to our effective tax rate. Additionally, an income tax benefit of $185.1 million was recorded as a result of a change in the deferred tax asset valuation allowance resulting from the Genomic Health combination. In connection with the Genomic Health combination, a deferred tax liability was recorded for identified intangible assets. These deferred tax liabilities are considered a source of future taxable income which allowed us to reduce the pre-combination deferred tax asset valuation allowance. The change in pre-combination deferred tax asset valuation allowance of an acquirer is a transaction recognized separate from the business combination and reduces income tax expense in the period of the business combination.

**Critical Accounting Policies and Estimates**

Management’s discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the U.S. (“GAAP”). The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements as well as the reported revenues and expenses during the reporting periods. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, tax positions, and stock-based compensation. We base our estimates on historical experience and on various other factors that are believed to be appropriate under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are more fully described in Note 1 in the Notes to Consolidated Financial Statements, we believe that the following accounting policies and judgments are most critical to aid in fully understanding and evaluating our reported financial results.

**Revenue Recognition.**

Revenue. Our revenue is primarily generated by our laboratory testing services utilizing our Cologuard and Oncotype DX tests. The services are completed upon delivery of a patient’s test result to the ordering healthcare provider. We account for revenue in accordance with Accounting Standards Codification Topic 606, *Revenue from Contracts with Customers* (“ASC 606”), which we adopted on January 1, 2018, using the modified retrospective method, which we elected to apply to all contracts. Application of the modified retrospective method did not impact amounts previously reported by us, nor did it require a cumulative effect adjustment upon adoption, as our method of recognizing revenue under ASC 606 was analogous to the method utilized immediately prior to adoption. Accordingly, there is no need for us to disclose the amount by which each financial statement line item was affected as a result of applying the new standard and an explanation of significant changes.

The core principle of ASC 606 is that we recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which we expect to be entitled in exchange for those goods or services. We recognize revenues from our products in accordance with that core principle, and key aspects considered include the following:

**Contracts**

Our customer is the patient. However, we do not enter into a formal reimbursement contract with a patient, as formal reimbursement contracts are established with payers. Accordingly, we establish a contract with a patient in accordance with other customary business practices.

- Approval of a contract is established via the order submitted by the patient’s healthcare provider and the receipt of a sample in the laboratory.
We are obligated to perform our laboratory services upon acceptance of a sample from a patient, and the patient and/or applicable payer are obligated to reimburse us for services rendered based on the patient’s insurance benefits.

Payment terms are a function of a patient’s existing insurance benefits, including the impact of coverage decisions with CMS and any applicable reimbursement contracts established between us and payers, unless the patient is a self-pay patient, whereby we require payment from the patient prior to commencement of the our performance obligations.

Once we release a patient’s test result to the ordering healthcare provider, we are legally able to collect payment and bill an insurer, patient and/or health system, depending on payer contract status or patient insurance benefit status.

Our consideration is deemed to be variable, and we consider collection of such consideration to be probable to the extent that it is unconstrained.

**Performance obligations**

A performance obligation is a promise in a contract to transfer a distinct good or service (or a bundle of goods or services) to the customer. Our contracts have a single performance obligation, which is satisfied upon rendering of services, which culminates in the release of a patient’s test result to the ordering healthcare provider. We elect the practical expedient related to disclosure of unsatisfied performance obligations, as the duration of time between sample receipt and release of a valid test result to the ordering healthcare provider is far less than one year.

**Transaction price**

The transaction price is the amount of consideration that we expect to collect in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration expected from a contract with a customer may include fixed amounts, variable amounts, or both.

The consideration derived from our contracts is deemed to be variable, though the variability is not explicitly stated in any contract. Rather, the implied variability is due to several factors, such as the amount of contractual adjustments, any patient co-payments, deductibles or compliance incentives, the existence of secondary payers and claim denials.

We estimate the amount of variable consideration using the expected value method, which represents the sum of probability-weighted amounts in a range of possible consideration amounts. When estimating the amount of variable consideration, the Company considers several factors, such as historical collections experience, patient insurance eligibility and payer reimbursement contracts.

We limit the amount of variable consideration included in the transaction price to the unconstrained portion of such consideration. In other words, we recognize revenue up to the amount of variable consideration that is not subject to a significant reversal until additional information is obtained or the uncertainty associated with the additional payments or refunds is subsequently resolved. Differences between original estimates and subsequent revisions, including final settlements, represent changes in the estimate of variable consideration and are included in the period in which such revisions are made. Revenue recognized from changes in transaction prices was $9.9 million and $15.0 million for the years ended December 31, 2019 and 2018, respectively.

We monitor our estimates of transaction price to depict conditions that exist at each reporting date. If we subsequently determine that we will collect more consideration than we originally estimated for a contract with a patient, we will account for the change as an increase in the estimate of the transaction price (i.e., an upward revenue adjustment) in the period identified. Similarly, if we subsequently determine that the amount we expect to collect from a patient is less than we originally estimated, we will generally account for the change as a decrease in the estimate of the transaction price (i.e., a downward revenue adjustment), provided that such downward adjustment does not result in a significant reversal of cumulative revenue recognized.

When we do not have significant historical experience or that experience has limited predictive value, the constraint over estimates of variable consideration may result in no revenue being recognized upon release of the performance obligations associated with our tests, with recognition generally occurring at the date of cash receipt.
Allocate transaction price

The transaction price is allocated entirely to the single performance obligation contained within the contract with a patient.

Point in time recognition

Our single performance obligation is satisfied at a point in time, and that point in time is defined as the date a patient’s successful test result is released to the patient’s ordering healthcare provider. We consider this date to be the time at which the patient obtains control of the promised test service.

Disaggregation of Revenue

The following table presents our revenues disaggregated by revenue source:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Screening</td>
<td></td>
</tr>
<tr>
<td>Medicare Parts B &amp; C</td>
<td>$404,331</td>
</tr>
<tr>
<td>Commercial</td>
<td>368,006</td>
</tr>
<tr>
<td>Other</td>
<td>37,783</td>
</tr>
<tr>
<td>Total Screening</td>
<td>810,120</td>
</tr>
<tr>
<td>Precision Oncology</td>
<td></td>
</tr>
<tr>
<td>Medicare Parts B &amp; C</td>
<td>$24,325</td>
</tr>
<tr>
<td>Commercial</td>
<td>29,976</td>
</tr>
<tr>
<td>International</td>
<td>11,444</td>
</tr>
<tr>
<td>Other</td>
<td>428</td>
</tr>
<tr>
<td>Total Precision Oncology</td>
<td>66,173</td>
</tr>
<tr>
<td>Total</td>
<td>$876,293</td>
</tr>
</tbody>
</table>

Screening includes laboratory service revenue from Cologuard and revenue from Biomatrica products. Precision Oncology includes laboratory service revenue from global Oncotype DX products.

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable and deferred revenue on the consolidated balance sheets. Generally, billing occurs subsequent to the release of a patient’s test result to the ordering healthcare provider, resulting in an account receivable. However, we sometimes receive advance payment from a patient, particularly a self-pay patient, before a test result is completed, resulting in deferred revenue. The deferred revenue balance is relieved upon release of the applicable patient’s test result to the ordering healthcare provider. As of December 31, 2019 and 2018, the deferred revenue balance is not material to our consolidated financial statements.

Practical expedients

We do not adjust the transaction price for the effects of a significant financing component, as at contract inception we expect the collection cycle to be one year or less.

We expense sales commissions when incurred because the amortization period would have been one year or less. These costs are recorded within sales and marketing expenses on our consolidated statements of operations.

We incur certain other costs that are incurred regardless of whether a contract is obtained. Such costs are primarily related to legal services and patient communications (e.g. adherence reminder letters). These costs are expensed as incurred and recorded within general and administrative expenses on our consolidated statements of operations.
**Tax Positions.** A valuation allowance to reduce the deferred tax assets is reported if, based on the weight of the evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. We have incurred significant losses since our inception and due to the uncertainty of the amount and timing of future taxable income, management has determined that a $120.7 million and $209.9 million valuation allowance at December 31, 2019 and 2018 is necessary to reduce the tax assets to the amount that is more likely than not to be realized. The change in valuation allowance for 2019 and 2018 was a decrease of $89.2 million and $4.4 million, respectively. An income tax benefit of $185.1 million was recorded as a result of a change in the deferred tax asset valuation allowance resulting from the Genomic Health combination. In connection with the Genomic Health combination, a deferred tax liability was recorded for identified intangible assets. These deferred tax liabilities are considered a source of future taxable income which allowed us to reduce the pre-combination deferred tax asset valuation allowance. The change in pre-combination deferred tax asset valuation allowance of an acquirer is a transaction recognized separate from the business combination and reduces income tax expense in the period of the business combination. Due to the existence of the valuation allowance, future changes in our unrecognized tax benefits will not impact our effective tax rate.

**Convertible Notes.** We account for convertible debt instruments that may be settled in cash or equity upon conversion by separating the liability and equity components of the instruments in a manner that reflects our nonconvertible debt borrowing rate. In January 2018 and June 2018, we issued the 2025 Notes of $690.0 million and $218.5 million, in aggregate principal amount of 1.0% Convertible Notes with a maturity date of January 15, 2025. In March 2019 we issued the 2027 Notes of $747.5 million in aggregate principal amount of 0.375% Convertible Notes with a maturity date of March 15, 2027. In March 2019, we settled approximately $493.4 million in outstanding 2025 Notes. We determined the carrying amount of the liability component of the Notes by using assumptions that market participants would use in pricing a debt instrument, including market interest rates, credit standing, yield curves and volatilities. Determining the fair value of the debt component requires the use of accounting estimates and assumptions. These estimates and assumptions are judgmental in nature and could have a significant impact on the determination of the debt component, and the associated non-cash interest expense.

For the January 2018 offering, we allocated $194.9 million to the equity component of the convertible debt instrument. That equity component is treated as a discount on the liability component of the 2025 Notes, which is amortized over the seven-year term of the 2025 Notes using the effective interest rate method. For the June 2018 offering, we allocated $73.0 million to the equity component of the convertible debt instrument. That equity component, less the $14.2 million premium, is treated as a discount on the liability component of the 2025 Notes, which is amortized over the remaining six-and-a-half-year term of the 2025 Notes using the effective interest rate method. For the March 2019 offering, we allocated $275.0 million to the equity component of the convertible debt instrument. That equity component is treated as a discount on the liability component of the 2027 Notes, which is amortized over the eight-year term of the 2027 Notes using the effective interest rate method. In addition, debt issuance costs related to the Notes were $18.8 million, $7.4 million, and $18.0 million for the January 2018, June 2018, and March 2019 offerings, respectively. We allocated the costs to the liability and equity components of the Notes based on their relative values. The debt issuance costs allocated to the liability component are being amortized over the life of the Notes as additional non-cash interest expense. The transaction costs allocated to the equity component are netted with the equity component of the convertible debt instrument in stockholders’ equity.

**Business Combinations.** Business Combinations are accounted for under the acquisition method in accordance with ASC 805, Business Combinations. The acquisition method requires identifiable assets acquired and liabilities assumed and any non-controlling interest in the business acquired be recognized and measured at fair value on the acquisition date, which is the date that the acquirer obtains control of the acquired business. The amount by which the fair value of consideration transferred as the purchase price exceeds the net fair value of assets acquired and liabilities assumed is recorded as goodwill. Acquisitions that do not meet the definition of a business combination under the ASC are accounted for as asset acquisitions. Asset acquisitions are accounted for by allocating the cost of the acquisition to the individual assets acquired and liabilities assumed on a relative fair value basis. Goodwill is not recognized in an asset acquisition with any consideration in excess of net assets acquired allocated to acquired assets on a relative fair value basis. Transaction costs are expensed in a business combination and are considered a component of the cost of the acquisition in an asset acquisition.

In 2017, we recognized goodwill of $2.0 million from the acquisition of Sampleminded. In 2018, we recognized goodwill of $15.3 million from the acquisition of Biomatrica. In November 2019, we recognized goodwill of $1.2 billion from the combination with Genomic Health. We evaluate goodwill impairment on an annual basis or more frequently should an event or change in circumstance occur that indicates that the carrying amount is in excess of the fair value. There were no impairment losses for the years ended December 31, 2019, 2018, and 2017. Refer to Note 1 and 13 for further discussion of the goodwill recorded.
Recent Accounting Pronouncements

See Note 1 in the Notes to Consolidated Financial Statements for the discussion of Recent Accounting Pronouncements.

Off-Balance Sheet Arrangements

As of December 31, 2019, we had no off-balance sheet arrangements.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

Our exposure to market risk is principally confined to our cash, cash equivalents and marketable securities. We invest our cash, cash equivalents, and marketable securities in securities of the U.S. governments and its agencies and in investment-grade, highly liquid investments consisting of commercial paper, bank certificates of deposit, and corporate bonds, which as of December 31, 2019 and December 31, 2018 were classified as available-for-sale. We place our cash, cash equivalents, restricted cash, and marketable securities with high-quality financial institutions, limit the amount of credit exposure to any one institution, and have established investment guidelines relative to diversification and maturities designed to maintain safety and liquidity.

Based on a hypothetical ten percent adverse movement in interest rates, the potential losses in future earnings, fair value of risk-sensitive financial instruments, and cash flows are immaterial, although the actual effects may differ materially from the hypothetical analysis. While we believe our cash, cash equivalents, restricted cash, and marketable securities do not contain excessive risk, we cannot provide absolute assurance that, in the future, our investments will not be subject to adverse changes in market value. In addition, we maintain significant amounts of cash, cash equivalents, restricted cash, and marketable securities at one or more financial institutions that are in excess of federally insured limits. Given the potential instability of financial institutions, we cannot provide assurance that we will not experience losses on these deposits. We do not utilize interest rate hedging agreements or other interest rate derivative instruments.

A hypothetical ten percent change in interest rates would not have a material adverse impact on our future operating results or cash flows. All of our significant interest-bearing liabilities bear interest at fixed rates and therefore are not subject to fluctuations in market interest rates; however, because these interest rates are fixed, we may be paying a higher interest rate, relative to market, in the future if circumstances change.

Foreign Currency Risk

Substantially all of our revenues are recognized in U.S. dollars, although a growing percentage is denominated in foreign currency as we continue to expand into markets outside of the U.S. Certain expenses related to our international activities are payable in foreign currencies. As a result, factors such as changes in foreign currency exchange rates or weak economic conditions in foreign markets will affect our financial results.

In 2017 and 2018, our international subsidiaries functional currency was the local currency. For 2019 our international subsidiaries use the U.S. dollar as the functional currency, resulting in no net foreign exchange transaction gains (losses) for the year ended December 31, 2019 and net foreign exchange transaction gains (losses) were not significant for the years ended December 31, 2018, and 2017, respectively. In September 2017, Genomic Health (now a wholly owned subsidiary) started entering into forward contracts to mitigate the impact of adverse movements in foreign exchange rates related to the re-measurement of monetary assets and liabilities and hedge our foreign currency exchange rate exposure. As of December 31, 2019, we had open foreign currency forward contracts with notional amounts of $17.9 million. Although the impact of currency fluctuations on our financial results has been immaterial in the past, there can be no guarantee that the impact of currency fluctuations related to our international activities will not be material in the future.
Item 8. Consolidated Financial Statements and Supplementary Data

EXACT SCIENCES CORPORATION
Index to Financial Statements

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Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Exact Sciences Corporation
Madison, Wisconsin

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Exact Sciences Corporation (the “Company”) as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive loss, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) and our report dated February 21, 2020 expressed an unqualified opinion thereon.

Change in Accounting Method Related to Leases

As discussed in Notes 1 and 6 to the consolidated financial statements, the Company has changed its method of accounting for leases in 2019 due to the adoption of Topic 842 — Leases.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the United States federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.
Variable Consideration in Revenue Contracts

As described in Note 1 to the consolidated financial statements, the Company’s revenue is primarily generated from laboratory services from its Cologuard and Oncotype DX products. The Company’s customer is the patient, however, formal reimbursement contracts, including a national coverage determination for Cologuard, are established with payers. The Company estimates the anticipated amount of the variable consideration to be received using the expected value method, which represents the sum of probability-weighted amounts in a range of possible consideration amounts.

We identified the determination of the variable consideration as a critical audit matter. When estimating variable consideration, the Company considers several factors, including historical collections experience together with lag time, the amount of contractual adjustments, changes in the current payer and volume mix, and new or modified reimbursement terms with payers. Auditing these elements involved especially challenging auditor judgment due to the nature and extent of audit effort required to address these matters, including the degree of auditor judgment.

The primary procedures we performed to address this critical audit matter included:

- Testing the design and operating effectiveness of certain controls over management’s review of the estimation process to determine the amount of the variable consideration including controls over the completeness and accuracy of the underlying transaction data and information technology general controls.
- Testing the completeness and accuracy of the underlying data related to payer and payer group, and historical cash collections used in establishing the estimated transaction price for laboratory services performed.
- Evaluating the reasonableness of the variable consideration and assumptions used through: (i) performing retrospective reviews that compared actual cash collections, by payer group, to the transaction price estimates, (ii) assessing the reasonableness of the historical lag periods used against recent transactions and payment experience, and (iii) analyzing amounts of contractual adjustments and collections history by individual payers.

Issuance and Extinguishment of Convertible Notes

As described in Note 9 to the consolidated financial statements, the Company issued $747.5 million in aggregate principal of convertible notes in March 2019 (“2027 Notes”). The Company used a portion of the proceeds from the issuance of the 2027 Notes, along with the issuance of the Company’s common stock, to settle $493.4 million of other outstanding convertible notes (“2025 Notes”) in privately negotiated transactions. As the 2027 Notes may be settled in cash upon conversion, the Company evaluated and determined that the 2027 Notes should be separated into a liability and equity components. Further, the Company determined that the settlement of a portion of the 2025 Notes was considered an extinguishment and a loss was recorded.

We identified the accounting and the valuation of the issuance and the extinguishment of convertible notes as a critical audit matter. Auditing the following elements involved especially challenging and complex auditor judgment due to the nature and extent of specialized skill and knowledge required: (i) the Company’s accounting assessment related to the bifurcation of the liability and equity components for the issuance of the 2027 Notes, (ii) the Company’s determination of the market discount rate and the expected life of the 2027 Notes, (iii) the Company’s accounting assessment related to the extinguishment of the 2025 Notes, and (iv) the calculation of the related loss on extinguishment of the 2025 Notes.

The primary procedures we performed to address this critical audit matter included:

- Utilizing personnel with specialized knowledge and skill in accounting to evaluate the appropriateness of management’s application of accounting guidance for complex financial instruments, primarily related to:
  o The assessment of whether the liability and equity components of the 2027 Notes should be bifurcated, and
  o The assessment of whether the settlement of a portion of the 2025 Notes should be treated as an extinguishment.
- Utilizing personnel with specialized knowledge and skill in valuation to assist in evaluating the appropriateness of the methodology and the reasonableness of assumptions used by the Company’s valuation specialist in determining:
  o The market discount rates used for the issuance of the 2027 Notes, as well as the expected life of the 2027 Notes, and
  o The fair value of the 2025 Notes immediately prior to the settlement.
Combination with Genomic Health, Inc.

As described in Note 13 to the consolidated financial statements, on November 8, 2019, the Company completed its combination with Genomic Health, Inc. ("Genomic Health"). The Company accounted for this combination under the acquisition method of accounting for business combinations. Accordingly, the purchase price was allocated to the assets acquired and liabilities assumed based on their respective fair values.

We identified the determination of the fair value of the developed technology and the in-process research and development ("IPR&D") assets as a critical audit matter. Management used various complex valuation methodologies and judgments to determine the fair value of the developed technology and the IPR&D assets including: (i) obsolescence factors, (ii) expected life of these intangible assets, (iii) discount rates, (iv) revenue growth rates, and (v) profit margins. Auditing these elements involved especially challenging and complex auditor judgment due to the nature and extent of specialized skill and knowledge required when evaluating the reasonableness of the Company’s underlying assumptions about the future performance of Genomic Health’s intangible assets acquired.

The primary procedures we performed to address this critical audit matter included:

- Evaluating the reasonableness of the inputs and assumptions used to determine the fair value of the developed technology and IPR&D assets, including (i) forecasted revenue growth rates in total and forecasted revenue growth rates specific to each intangible asset, (ii) expected gross profit margin, and (iii) estimates of earnings before interest and tax margin by comparing management’s forecasted revenue growth, cost of sales, and operating expenses against relevant other sources and historical results.
- Utilizing personnel with specialized knowledge and skill in valuation to assist in evaluating the appropriateness of the methodologies and the reasonableness of certain assumptions used by the Company’s valuation specialist in determining the fair value of the developed technology and IPR&D assets, including:
  - The valuation methodology used,
  - The obsolescence factor applied,
  - The expected life of developed technology and IPR&D,
  - The internal rate of return, and
  - The weighted average cost of capital

/s/ BDO USA, LLP

We have served as the Company’s auditor since 2012.

Madison, Wisconsin
February 21, 2020
Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Exact Sciences Corporation
Madison, Wisconsin

Opinion on Internal Control over Financial Reporting

We have audited Exact Sciences Corporation’s (the “Company’s”) internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control—Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (the “COSO criteria”). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the consolidated balance sheets of the Company as of December 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive loss, stockholders’ equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and our report dated February 21, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

The Company’s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Item 9A, Management’s Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with United States federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit of internal control over financial reporting in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

As indicated in the accompanying Item 9A, Management’s Report on Internal Control over Financial Reporting, management’s assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Genomic Health, Inc., which was combined with the Company on November 8, 2019, and which is included in the consolidated balance sheets of the Company as of December 31, 2019, and the related consolidated statements of operations, comprehensive loss, stockholders’ equity, and cash flows for the year then ended. Genomic Health, Inc. constituted 8% of the Company's total consolidated assets (excluding goodwill and intangible assets related to the transaction, which were integrated into the Company's systems and control environment) as of December 31, 2019, and 8% of total consolidated revenue for the year ended December 31, 2019. Management did not assess the effectiveness of internal control over financial reporting of Genomic Health, Inc. because of the timing of the acquisition which was completed on November 8, 2019. Our audit of internal control over financial reporting of the Company also did not include an evaluation of the internal control over financial reporting of Genomic Health, Inc.
Definition and Limitations of Internal Control over Financial Reporting

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ BDO USA, LLP

Madison, Wisconsin
February 21, 2020
EXACT SCIENCES CORPORATION
Consolidated Balance Sheets
(Amounts in thousands, except share data)

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSETS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Assets:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>$177,254</td>
<td>$160,430</td>
</tr>
<tr>
<td>Marketable securities</td>
<td>146,401</td>
<td>963,752</td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>130,667</td>
<td>45,329</td>
</tr>
<tr>
<td>Inventory, net</td>
<td>61,724</td>
<td>39,148</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>40,913</td>
<td>19,408</td>
</tr>
<tr>
<td>Total current assets</td>
<td>556,959</td>
<td>1,228,067</td>
</tr>
<tr>
<td>Long-term Assets:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property, plant and equipment, net</td>
<td>455,325</td>
<td>245,259</td>
</tr>
<tr>
<td>Operating lease right-of-use assets</td>
<td>126,444</td>
<td>—</td>
</tr>
<tr>
<td>Goodwill</td>
<td>1,203,197</td>
<td>17,279</td>
</tr>
<tr>
<td>Intangibles, net</td>
<td>1,143,550</td>
<td>29,002</td>
</tr>
<tr>
<td>Other long-term assets, net</td>
<td>20,293</td>
<td>4,415</td>
</tr>
<tr>
<td>Total assets</td>
<td>$3,505,768</td>
<td>$1,524,022</td>
</tr>
<tr>
<td><strong>LIABILITIES AND STOCKHOLDERS’ EQUITY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current Liabilities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts payable</td>
<td>$25,973</td>
<td>$28,141</td>
</tr>
<tr>
<td>Accrued liabilities</td>
<td>193,329</td>
<td>100,644</td>
</tr>
<tr>
<td>Operating lease liabilities, current portion</td>
<td>7,891</td>
<td>—</td>
</tr>
<tr>
<td>Debt, current portion</td>
<td>834</td>
<td>8</td>
</tr>
<tr>
<td>Other current liabilities</td>
<td>8,467</td>
<td>7,376</td>
</tr>
<tr>
<td>Total current liabilities</td>
<td>236,494</td>
<td>136,169</td>
</tr>
<tr>
<td>Long-term Liabilities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Convertible notes, net</td>
<td>803,605</td>
<td>664,749</td>
</tr>
<tr>
<td>Long-term debt, less current portion</td>
<td>24,032</td>
<td>24,494</td>
</tr>
<tr>
<td>Other long-term liabilities</td>
<td>34,911</td>
<td>17,669</td>
</tr>
<tr>
<td>Operating lease liabilities, less current portion</td>
<td>118,665</td>
<td>—</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>1,217,707</td>
<td>843,081</td>
</tr>
<tr>
<td>Commitments and contingencies</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockholders’ Equity:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred stock, $0.01 par value Authorized—5,000,000 shares issued and outstanding—no shares at December 31, 2019 and December 31, 2018</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Common stock, $0.01 par value Authorized—200,000,000 shares issued and outstanding—147,625,696 and 123,192,540 shares at December 31, 2019 and December 31, 2018</td>
<td>1,477</td>
<td>1,232</td>
</tr>
<tr>
<td>Additional paid-in capital</td>
<td>3,406,440</td>
<td>1,716,894</td>
</tr>
<tr>
<td>Accumulated other comprehensive loss</td>
<td>(100)</td>
<td>(1,422)</td>
</tr>
<tr>
<td>Accumulated deficit</td>
<td>(1,119,756)</td>
<td>(1,035,763)</td>
</tr>
<tr>
<td>Total stockholders’ equity</td>
<td>2,288,061</td>
<td>680,941</td>
</tr>
<tr>
<td>Total liabilities and stockholders’ equity</td>
<td>$3,505,768</td>
<td>$1,524,022</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these consolidated financial statements.
# EXACT SCIENCES CORPORATION

## Consolidated Statements of Operations

(Amounts in thousands, except per share data)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td>$876,293</td>
<td>$454,462</td>
<td>$265,989</td>
</tr>
<tr>
<td><strong>Operating expenses:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost of sales (exclusive of amortization of acquired intangibles)</td>
<td>216,717</td>
<td>116,644</td>
<td>78,305</td>
</tr>
<tr>
<td>Research and development</td>
<td>139,694</td>
<td>67,285</td>
<td>42,099</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>385,176</td>
<td>249,448</td>
<td>153,924</td>
</tr>
<tr>
<td>General and administrative</td>
<td>352,453</td>
<td>178,016</td>
<td>108,988</td>
</tr>
<tr>
<td>Amortization of acquired intangibles</td>
<td>16,035</td>
<td>2,540</td>
<td>983</td>
</tr>
<tr>
<td><strong>Total operating expenses</strong></td>
<td>1,110,075</td>
<td>613,933</td>
<td>384,299</td>
</tr>
<tr>
<td><strong>Loss from operations</strong></td>
<td>(233,782)</td>
<td>(159,471)</td>
<td>(118,310)</td>
</tr>
<tr>
<td><strong>Other income (expense)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment income</td>
<td>26,530</td>
<td>21,203</td>
<td>3,932</td>
</tr>
<tr>
<td>Interest expense</td>
<td>(61,599)</td>
<td>(36,789)</td>
<td>(206)</td>
</tr>
<tr>
<td><strong>Total other income (expense)</strong></td>
<td>(35,069)</td>
<td>(15,586)</td>
<td>3,726</td>
</tr>
<tr>
<td><strong>Net loss before tax</strong></td>
<td>(268,851)</td>
<td>(175,057)</td>
<td>(114,584)</td>
</tr>
<tr>
<td><strong>Income tax benefit (expense)</strong></td>
<td>184,858</td>
<td>(92)</td>
<td>187</td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td>$ (83,993)</td>
<td>$ (175,149)</td>
<td>$ (114,397)</td>
</tr>
<tr>
<td><strong>Net loss per share—basic and diluted</strong></td>
<td>$ (0.64)</td>
<td>$ (1.43)</td>
<td>$ (0.99)</td>
</tr>
<tr>
<td><strong>Weighted average common shares outstanding—basic and diluted</strong></td>
<td>131,257</td>
<td>122,207</td>
<td>115,684</td>
</tr>
</tbody>
</table>

*The accompanying notes are an integral part of these consolidated financial statements.*

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EXACT SCIENCES CORPORATION  
Consolidated Statements of Comprehensive Loss  
(Amounts in thousands)  

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net loss</td>
<td>$(83,993)</td>
<td>$(175,149)</td>
<td>$(114,397)</td>
</tr>
<tr>
<td>Other comprehensive loss, net of tax:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unrealized gain (loss) on available-for-sale investments</td>
<td>1,322</td>
<td>(708)</td>
<td>(475)</td>
</tr>
<tr>
<td>Foreign currency translation gain</td>
<td>—</td>
<td>36</td>
<td>143</td>
</tr>
<tr>
<td>Comprehensive loss</td>
<td>$(82,671)</td>
<td>$(175,821)</td>
<td>$(114,729)</td>
</tr>
</tbody>
</table>

*The accompanying notes are an integral part of these consolidated financial statements.*
## Exact Sciences Corporation

### Consolidated Statements of Stockholders’ Equity

(Amounts in thousands, except share data)

<table>
<thead>
<tr>
<th></th>
<th>Number of Shares</th>
<th>$0.01 Par Value</th>
<th>Additional Paid In Capital</th>
<th>Other Comprehensive Income (Loss)</th>
<th>Accumulated Deficit</th>
<th>Total Stockholders’ Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Balance, January 1, 2017</strong></td>
<td>110,236,127</td>
<td>$1,102</td>
<td>$1,080,432</td>
<td>$(418)</td>
<td>$(745,821)</td>
<td>$335,295</td>
</tr>
<tr>
<td><strong>Cumulative-effect adjustment - ASU 2016-09 adoption</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Issuance of common stock, net of issuance costs of $7.4 million</strong></td>
<td>7,450,000</td>
<td>74</td>
<td>253,314</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Exercise of common stock options</strong></td>
<td>1,067,047</td>
<td>11</td>
<td>5,092</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Issuance of common stock to fund the Company’s 2016 401(k) match</strong></td>
<td>158,717</td>
<td>2</td>
<td>3,006</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compensation expense related to issuance of stock options and restricted stock awards</strong></td>
<td>1,162,112</td>
<td>12</td>
<td>35,500</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Purchase of employee stock purchase plan shares</strong></td>
<td>423,423</td>
<td>4</td>
<td>2,837</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accumulated other comprehensive income</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Balance, December 31, 2017</strong></td>
<td>120,497,426</td>
<td>$1,205</td>
<td>$1,380,577</td>
<td>$(750)</td>
<td>$(860,614)</td>
<td>$520,418</td>
</tr>
<tr>
<td><strong>Equity component of convertible debt, net of issuance costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Exercise of common stock options</strong></td>
<td>1,033,012</td>
<td>10</td>
<td>6,626</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Issuance of common stock to fund the Company’s 2017 401(k) match</strong></td>
<td>86,882</td>
<td>1</td>
<td>4,302</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compensation expense related to issuance of stock options and restricted stock awards</strong></td>
<td>1,228,611</td>
<td>13</td>
<td>60,251</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Purchase of employee stock purchase plan shares</strong></td>
<td>346,609</td>
<td>3</td>
<td>4,892</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accumulated other comprehensive loss</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Balance, December 31, 2018</strong></td>
<td>123,192,540</td>
<td>$1,232</td>
<td>$1,716,894</td>
<td>$(1,422)</td>
<td>$(1,035,763)</td>
<td>$680,941</td>
</tr>
<tr>
<td><strong>Settlement of convertible notes</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Shares issued to settle convertible notes</strong></td>
<td>2,159,716</td>
<td>22</td>
<td>182,455</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Equity component of convertible debt, net of issuance costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Exercise of common stock options</strong></td>
<td>641,925</td>
<td>6</td>
<td>8,781</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Issuance of common stock to fund the Company’s 2018 401(k) match</strong></td>
<td>86,532</td>
<td>1</td>
<td>7,408</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compensation expense related to issuance of stock options and restricted stock awards</strong></td>
<td>4,322,366</td>
<td>43</td>
<td>108,440</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Purchase of employee stock purchase plan shares</strong></td>
<td>176,458</td>
<td>2</td>
<td>8,394</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Issuance of common stock for business combinations</strong></td>
<td>17,046,159</td>
<td>171</td>
<td>1,406,909</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stock issuance costs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Accumulated other comprehensive loss</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Balance, December 31, 2019</strong></td>
<td>147,625,696</td>
<td>$1,477</td>
<td>$3,406,440</td>
<td>$(100)</td>
<td>$(1,119,756)</td>
<td>$2,288,061</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these consolidated financial statements.
EXACT SCIENCES CORPORATION  
Consolidated Statements of Cash Flows  
(Amounts in thousands, except share data)  

<table>
<thead>
<tr>
<th>Year Ended December 31,</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash flows from operating activities:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net loss</td>
<td>$(83,993)</td>
<td>$(175,149)</td>
<td>$(114,397)</td>
</tr>
<tr>
<td>Adjustments to reconcile net loss to net cash used in operating activities:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depreciation and other amortization</td>
<td>34,212</td>
<td>20,544</td>
<td>14,572</td>
</tr>
<tr>
<td>Loss on disposal of property, plant and equipment</td>
<td>1,394</td>
<td>353</td>
<td>954</td>
</tr>
<tr>
<td>Realized gain on sale of marketable securities</td>
<td>(3,355)</td>
<td>(385)</td>
<td>(23)</td>
</tr>
<tr>
<td>Unrealized net loss on revaluation of equity securities</td>
<td>207</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Loss on preferred stock investment</td>
<td>—</td>
<td>765</td>
<td>—</td>
</tr>
<tr>
<td>Deferred tax benefit</td>
<td>(185,109)</td>
<td>—</td>
<td>(115)</td>
</tr>
<tr>
<td>Stock-based compensation</td>
<td>108,483</td>
<td>60,264</td>
<td>35,512</td>
</tr>
<tr>
<td>Loss on settlement of convertible notes</td>
<td>10,558</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Amortization of convertible note debt discount and issuance costs</td>
<td>42,256</td>
<td>28,564</td>
<td>—</td>
</tr>
<tr>
<td>Amortization of liabilities</td>
<td>(4,467)</td>
<td>(2,394)</td>
<td>(1,620)</td>
</tr>
<tr>
<td>Amortization of premium on short-term investments</td>
<td>(3,102)</td>
<td>(3,516)</td>
<td>88</td>
</tr>
<tr>
<td>Amortization of acquired intangibles</td>
<td>16,035</td>
<td>2,540</td>
<td>983</td>
</tr>
<tr>
<td>Non-cash lease expense</td>
<td>5,427</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Changes in assets and liabilities, net of effects of acquisition:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts receivable, net</td>
<td>(27,938)</td>
<td>(17,292)</td>
<td>(17,529)</td>
</tr>
<tr>
<td>Inventory, net</td>
<td>(19,041)</td>
<td>(12,729)</td>
<td>(19,194)</td>
</tr>
<tr>
<td>Operating lease liabilities</td>
<td>(4,114)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Accounts payable and accrued liabilities</td>
<td>3,469</td>
<td>33,076</td>
<td>30,537</td>
</tr>
<tr>
<td>Other assets and liabilities</td>
<td>(5,932)</td>
<td>(3,966)</td>
<td>(1,492)</td>
</tr>
<tr>
<td>Net cash used in operating activities</td>
<td>(115,010)</td>
<td>(69,325)</td>
<td>(71,724)</td>
</tr>
<tr>
<td><strong>Cash flows from investing activities:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchases of marketable securities</td>
<td>(634,117)</td>
<td>(1,192,506)</td>
<td>(357,051)</td>
</tr>
<tr>
<td>Maturities of marketable securities</td>
<td>1,660,559</td>
<td>579,171</td>
<td>271,466</td>
</tr>
<tr>
<td>Purchases of property, plant and equipment</td>
<td>(171,802)</td>
<td>(150,093)</td>
<td>(48,480)</td>
</tr>
<tr>
<td>Business combination, net of cash acquired</td>
<td>(973,861)</td>
<td>(17,908)</td>
<td>(2,980)</td>
</tr>
<tr>
<td>Purchases of intangible assets</td>
<td>—</td>
<td>—</td>
<td>(20,690)</td>
</tr>
<tr>
<td>Other investing activities</td>
<td>(1,852)</td>
<td>(578)</td>
<td>(3,070)</td>
</tr>
<tr>
<td>Net cash used in investing activities</td>
<td>(121,073)</td>
<td>(781,914)</td>
<td>(160,805)</td>
</tr>
<tr>
<td><strong>Cash flows from financing activities:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceeds from issuance of convertible notes, net</td>
<td>729,477</td>
<td>896,430</td>
<td>—</td>
</tr>
<tr>
<td>Proceeds from financing obligation, net payments on mortgage payable</td>
<td>—</td>
<td>2,084</td>
<td>(174)</td>
</tr>
<tr>
<td>Proceeds from exercise of common stock options</td>
<td>8,787</td>
<td>6,636</td>
<td>5,103</td>
</tr>
<tr>
<td>Proceeds from sale of common stock, net of issuance costs</td>
<td>—</td>
<td>2,388</td>
<td>—</td>
</tr>
<tr>
<td>Proceeds in connection with the Company's employee stock purchase plan</td>
<td>8,396</td>
<td>4,895</td>
<td>2,841</td>
</tr>
<tr>
<td>Payments on settlement of convertible notes</td>
<td>(493,356)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Proceeds from construction loan, net deferred financing costs</td>
<td>319</td>
<td>24,236</td>
<td>(202)</td>
</tr>
<tr>
<td>Other financing activities</td>
<td>(442)</td>
<td>(139)</td>
<td>—</td>
</tr>
<tr>
<td>Net cash provided by financing activities</td>
<td>253,181</td>
<td>934,142</td>
<td>260,956</td>
</tr>
<tr>
<td><strong>Effects of exchange rate changes on cash and cash equivalents</strong></td>
<td>—</td>
<td>36</td>
<td>143</td>
</tr>
<tr>
<td><strong>Net increase in cash, cash equivalents and restricted cash</strong></td>
<td>17,098</td>
<td>82,939</td>
<td>28,570</td>
</tr>
<tr>
<td><strong>Cash, cash equivalents and restricted cash at the beginning of period</strong></td>
<td>160,430</td>
<td>77,491</td>
<td>48,921</td>
</tr>
<tr>
<td><strong>Cash, cash equivalents and restricted cash at the end of period</strong></td>
<td>$177,528</td>
<td>$160,430</td>
<td>$77,491</td>
</tr>
</tbody>
</table>

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### Supplemental disclosure of non-cash investing and financing activities:

<table>
<thead>
<tr>
<th>Description</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, plant and equipment acquired but not paid</td>
<td>$10,265</td>
<td>$33,452</td>
<td>$8,818</td>
</tr>
<tr>
<td>Property acquired under build-to-suit lease</td>
<td>—</td>
<td>$2,092</td>
<td>—</td>
</tr>
<tr>
<td>Unrealized loss on available-for-sale investments</td>
<td>1,322</td>
<td>(708)</td>
<td>(475)</td>
</tr>
<tr>
<td>Issuance of 86,532, 86,882, and 158,717 shares of common stock to fund the Company’s 401(k) matching contribution for 2018, 2017, and 2016, respectively</td>
<td>7,409</td>
<td>4,303</td>
<td>3,008</td>
</tr>
<tr>
<td>Issuance of 2,159,716 shares of common stock upon settlement of convertible notes</td>
<td>(182,477)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Retirement of equity component of convertible notes settled</td>
<td>(300,768)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Issuance of 17,046,159 shares of common stock for business combination</td>
<td>(1,407,080)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Business acquisition contingent consideration liability</td>
<td>—</td>
<td>3,060</td>
<td>—</td>
</tr>
</tbody>
</table>

### Supplemental disclosure of cash flow information:

<table>
<thead>
<tr>
<th>Description</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interest paid</td>
<td>$9,301</td>
<td>$4,638</td>
<td>$201</td>
</tr>
</tbody>
</table>

The accompanying notes are an integral part of these consolidated financial statements.
(1) SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Business

Exact Sciences Corporation (together with its subsidiaries, “Exact,” or the “Company”) was incorporated in February 1995. Exact is a leading global cancer diagnostics company. It has developed some of the most impactful brands in cancer screening and diagnostics, including Cologuard and Oncotype DX. Exact is currently working on the development of additional tests for other types of cancer, with the goal of bringing new innovative cancer tests to patients throughout the world.

On November 8, 2019, Exact completed a combination (the “Combination”) with Genomic Health, Inc. (“Genomic Health”), under which the Company acquired Genomic Health, which is a leading provider of genomic based diagnostic tests to help to optimize cancer care.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company’s wholly-owned subsidiaries and variable interest entities. See Note 12 for the discussion of financing arrangements involving certain entities that are variable interest entities that are included in the Company’s consolidated financial statements. The functional currency for the Company’s wholly-owned subsidiaries incorporated outside the United States (“U.S.”) is the U.S. dollar. All intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates

The preparation of the consolidated financial statements in conformity with accounting principles generally accepted in the United States (“GAAP”) requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers cash on hand, demand deposits in a bank, money market funds, and all highly liquid investments with an original maturity of 90 days or less to be cash and cash equivalents.

 Marketable Securities

Management determines the appropriate classification of debt securities at the time of purchase and re-evaluates such designation as of each balance sheet date. Debt securities carried at amortized cost are classified as held-to-maturity when the Company has the positive intent and ability to hold the securities to maturity. Debt securities not classified as held-to-maturity are classified as available-for-sale. Available-for-sale securities are carried at fair value. The unrealized gains and losses, net of tax, on the Company's debt securities are reported in other comprehensive income. Marketable equity securities are measured at fair value and the unrealized gains and losses, net of tax, are recognized in other income (expense) in the consolidated statement of operations. The amortized cost of debt securities in this category is adjusted for amortization of premiums and accretion of discounts to maturity computed under the straight-line method. Such amortization is included in investment income. Realized gains and losses and declines in value judged to be other-than-temporary on available-for-sale securities are included in investment income. The cost of securities sold is based on the specific identification method. Interest and dividends on securities classified as available-for-sale are included in investment income.

The Company’s investment policy limits investments to certain types of instruments issued by institutions with investment grade credit ratings and places restrictions on maturities and concentration by type and issuer. Investments in which the Company has the ability and intent, if necessary, to liquidate in order to support its current operations (including those with a contractual term greater than one year from the date of purchase) are classified as current. Realized gains were $3.4 million, $0.4 million, and $23,000, net of insignificant realized losses, for the years ended December 31, 2019, 2018, and 2017, respectively and are included in investment income in the Company's consolidated statements of operations.
The Company periodically evaluates investments in unrealized loss positions for other-than-temporary impairments. This evaluation includes, but is not limited to, significant quantitative and qualitative assessments and estimates regarding credit ratings, collateralized support, the length of time and significance of a security’s loss position, the Company’s intent not to sell the security, and whether it is more likely than not that the Company will have to sell the security before recovery of its cost basis. As of December 31, 2019 and 2018, no investments were identified with other-than-temporary declines in value.

The following table sets forth the Company’s cash, cash equivalents, restricted cash, and marketable securities at December 31, 2019 and 2018:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash, cash equivalents, and restricted cash</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and money market</td>
<td>$146,932</td>
<td>$75,375</td>
</tr>
<tr>
<td>Cash equivalents</td>
<td>30,322</td>
<td>85,055</td>
</tr>
<tr>
<td>Restricted cash (1)</td>
<td>274</td>
<td>—</td>
</tr>
<tr>
<td>Total cash, cash equivalents and restricted cash</td>
<td>177,528</td>
<td>160,430</td>
</tr>
<tr>
<td>Marketable securities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Available-for-sale debt securities</td>
<td>144,685</td>
<td>963,752</td>
</tr>
<tr>
<td>Equity securities</td>
<td>1,716</td>
<td>—</td>
</tr>
<tr>
<td>Total marketable securities</td>
<td>146,401</td>
<td>963,752</td>
</tr>
<tr>
<td>Total cash and cash equivalents, restricted cash and marketable securities</td>
<td>$323,929</td>
<td>$1,124,182</td>
</tr>
</tbody>
</table>

(1) Restricted cash is included in other long-term assets on the consolidated balance sheets. The Company had no restricted cash at December 31, 2018 or December 31, 2017.

Available-for-sale debt securities at December 31, 2019 consisted of the following:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Amortized Cost</th>
<th>Gains in Accumulated Other Comprehensive Income (Loss) (1)</th>
<th>Losses in Accumulated Other Comprehensive Income (Loss) (1)</th>
<th>Estimated Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash equivalents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>$30,320</td>
<td>$2</td>
<td>—</td>
<td>$30,322</td>
</tr>
<tr>
<td>Total cash equivalents</td>
<td>30,320</td>
<td>2</td>
<td>—</td>
<td>30,322</td>
</tr>
<tr>
<td>Marketable securities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>4,017</td>
<td>—</td>
<td>(14)</td>
<td>4,003</td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>140,745</td>
<td>10</td>
<td>(73)</td>
<td>140,682</td>
</tr>
<tr>
<td>Total marketable securities</td>
<td>144,762</td>
<td>10</td>
<td>(87)</td>
<td>144,685</td>
</tr>
<tr>
<td>Total available-for-sale debt securities</td>
<td>$175,082</td>
<td>$12</td>
<td>(87)</td>
<td>$175,007</td>
</tr>
</tbody>
</table>

(1) Gains and losses in accumulated other comprehensive income (loss) are reported net of tax.
Available-for-sale debt securities at December 31, 2018 consisted of the following:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Amortized Cost</th>
<th>Gains in Accumulated Other Comprehensive Income (Loss) (1)</th>
<th>Losses in Accumulated Other Comprehensive Income (Loss) (1)</th>
<th>Estimated Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cash equivalents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>$ 49,982</td>
<td>$ 3</td>
<td>—</td>
<td>$ 49,985</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>24,072</td>
<td>—</td>
<td>(2)</td>
<td>24,070</td>
</tr>
<tr>
<td>Certificates of deposit</td>
<td>11,000</td>
<td>—</td>
<td>—</td>
<td>11,000</td>
</tr>
<tr>
<td><strong>Total cash equivalents</strong></td>
<td>85,054</td>
<td>3</td>
<td>(2)</td>
<td>85,055</td>
</tr>
<tr>
<td>** Marketable securities**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>392,973</td>
<td>33</td>
<td>(719)</td>
<td>392,287</td>
</tr>
<tr>
<td>Asset backed securities</td>
<td>277,538</td>
<td>30</td>
<td>(569)</td>
<td>276,999</td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>250,606</td>
<td>43</td>
<td>(178)</td>
<td>250,471</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>12,158</td>
<td>—</td>
<td>(7)</td>
<td>12,151</td>
</tr>
<tr>
<td>Certificates of deposit</td>
<td>31,875</td>
<td>—</td>
<td>(31)</td>
<td>31,844</td>
</tr>
<tr>
<td><strong>Total marketable securities</strong></td>
<td>965,150</td>
<td>106</td>
<td>(1,504)</td>
<td>963,752</td>
</tr>
<tr>
<td><strong>Total available-for-sale debt securities</strong></td>
<td>$ 1,050,204</td>
<td>$ 109</td>
<td>$ (1,506)</td>
<td>$ 1,048,807</td>
</tr>
</tbody>
</table>

(1) Gains and losses in accumulated other comprehensive income (loss) are reported net of tax.

**Changes in Accumulated Other Comprehensive Income (Loss)**

The amount recognized in accumulated other comprehensive income (loss) (“AOCI”) for the years ended December 31, 2019, 2018 and 2017 were as follows:

<table>
<thead>
<tr>
<th>In thousands</th>
<th>Cumulative Translation Adjustment</th>
<th>Unrealized Gain (Loss) on Securities</th>
<th>Accumulated Other Comprehensive Income (Loss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance at January 1, 2017</td>
<td>$ (204)</td>
<td>$ (214)</td>
<td>$ (418)</td>
</tr>
<tr>
<td>Other comprehensive income (loss) before reclassifications</td>
<td>143</td>
<td>(530)</td>
<td>(387)</td>
</tr>
<tr>
<td>Amounts reclassified from accumulated other comprehensive loss</td>
<td>—</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Net current period change in accumulated other comprehensive income (loss)</td>
<td>143</td>
<td>(475)</td>
<td>(332)</td>
</tr>
<tr>
<td>Balance at December 31, 2017</td>
<td>$ (61)</td>
<td>$ (689)</td>
<td>$ (750)</td>
</tr>
<tr>
<td>Other comprehensive income (loss) before reclassifications</td>
<td>36</td>
<td>(1,025)</td>
<td>(989)</td>
</tr>
<tr>
<td>Amounts reclassified from accumulated other comprehensive loss</td>
<td>—</td>
<td>317</td>
<td>317</td>
</tr>
<tr>
<td>Net current period change in accumulated other comprehensive income (loss)</td>
<td>36</td>
<td>(708)</td>
<td>(672)</td>
</tr>
<tr>
<td>Balance at December 31, 2018</td>
<td>$ (25)</td>
<td>$ (1,397)</td>
<td>$ (1,422)</td>
</tr>
<tr>
<td>Other comprehensive income (loss) before reclassifications</td>
<td>—</td>
<td>681</td>
<td>681</td>
</tr>
<tr>
<td>Amounts reclassified from accumulated other comprehensive loss</td>
<td>—</td>
<td>641</td>
<td>641</td>
</tr>
<tr>
<td>Net current period change in accumulated other comprehensive income (loss)</td>
<td>—</td>
<td>1,322</td>
<td>1,322</td>
</tr>
<tr>
<td>Balance at December 31, 2019</td>
<td>$ (25)</td>
<td>$ (75)</td>
<td>$ (100)</td>
</tr>
</tbody>
</table>
Amounts reclassified from accumulated other comprehensive loss for the years ended December 31, 2019, 2018 and 2017 were as follows:

<table>
<thead>
<tr>
<th>Details about AOCI Components (In thousands)</th>
<th>Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Change in value of available-for-sale investments</td>
<td>Investment income</td>
</tr>
<tr>
<td>Sales and maturities of available-for-sale investments</td>
<td></td>
</tr>
<tr>
<td>Total reclassifications</td>
<td>$641</td>
</tr>
</tbody>
</table>

Allowance for Doubtful Accounts

The Company estimates an allowance for doubtful accounts against accounts receivable based on estimates of expected collections consistent with historical cash collection experience. The allowance for doubtful accounts is evaluated on a regular basis and adjusted when trends, significant events or other substantive evidence indicate that expected collections will be less than applicable accrual rates. At December 31, 2019 and 2018 there was no allowance for doubtful accounts recorded. For the years ended December 31, 2019, 2018 and 2017, there was no bad debt expense written off against the allowance and charged to operating expense.

Inventory

Inventory is stated at the lower of cost or net realizable value. The Company determines the cost of inventory using the first-in, first out method (“FIFO”). The Company estimates the recoverability of inventory by reference to internal estimates of future demands and product life cycles, including expiration. The Company periodically analyzes its inventory levels to identify inventory that may expire prior to expected sale, no longer meets quality specifications, or has a cost basis in excess of its estimated realizable value and records a charge to cost of sales for such inventory as appropriate.

Direct and indirect manufacturing costs incurred during process validation and for other research and development activities, which are not permitted to be sold, have been expensed to research and development in the Company’s consolidated statements of operations.

Inventory consisted of the following:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw materials</td>
<td>$24,958</td>
<td>$12,761</td>
</tr>
<tr>
<td>Semi-finished and finished goods</td>
<td>36,766</td>
<td>26,387</td>
</tr>
<tr>
<td>Total inventory</td>
<td>$61,724</td>
<td>$39,148</td>
</tr>
</tbody>
</table>
Property, Plant and Equipment

Property, plant and equipment are stated at cost and depreciated using the straight-line method over the assets’ estimated useful lives. Land is stated at cost and does not depreciate. Maintenance and repairs are expensed when incurred; additions and improvements are capitalized. The estimated useful lives of property and equipment are as follows:

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimated Useful Life</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property, plant and equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land</td>
<td>n/a</td>
<td>$ 4,466</td>
<td>$ 4,466</td>
</tr>
<tr>
<td>Leasehold and building improvements</td>
<td>(1)</td>
<td>80,352</td>
<td>38,895</td>
</tr>
<tr>
<td>Land improvements</td>
<td>15 years</td>
<td>1,766</td>
<td>1,530</td>
</tr>
<tr>
<td>Buildings</td>
<td>30 years</td>
<td>112,815</td>
<td>7,928</td>
</tr>
<tr>
<td>Computer equipment and computer software</td>
<td>3 years</td>
<td>65,323</td>
<td>36,969</td>
</tr>
<tr>
<td>Laboratory equipment</td>
<td>3 - 10 years</td>
<td>104,008</td>
<td>37,518</td>
</tr>
<tr>
<td>Furniture and fixtures</td>
<td>3 years</td>
<td>14,539</td>
<td>8,353</td>
</tr>
<tr>
<td>Assets under construction</td>
<td>n/a</td>
<td>149,687</td>
<td>167,462</td>
</tr>
<tr>
<td>Property, plant and equipment, at cost</td>
<td></td>
<td>532,956</td>
<td>303,121</td>
</tr>
<tr>
<td>Accumulated depreciation</td>
<td></td>
<td>(77,631)</td>
<td>(57,862)</td>
</tr>
<tr>
<td>Property, plant and equipment, net</td>
<td></td>
<td>$ 455,325</td>
<td>$ 245,259</td>
</tr>
</tbody>
</table>

(1) Lesser of remaining lease term, building life, or estimated useful life.

Depreciation expense for the years ended December 31, 2019, 2018, and 2017 was $33.9 million, $20.5 million, and $14.5 million, respectively.

At December 31, 2019, the Company had $149.7 million of assets under construction which consisted of $126.2 million related to building and leasehold improvements, $18.9 million of costs related to laboratory equipment under construction, $3.9 million of capitalized costs related to software projects, and $0.7 million of furniture and fixtures. Depreciation will begin on these assets once they are placed into service. The Company expects to incur an additional $111.0 million to complete the building projects and leasehold improvements, $3.7 million to complete the laboratory equipment, $2.2 million of costs to complete the computer software projects, and minimal costs to complete the furniture and fixtures. These projects are expected to be completed in 2020 and 2021.

Software Development Costs

Software development costs related to internal use software are incurred in three stages of development: the preliminary project stage, the application development stage, and the post-implementation stage. Costs incurred during the preliminary project and post-implementation stages are expensed as incurred. Costs incurred during the application development stage that meet the criteria for capitalization are capitalized and amortized, when the software is ready for its intended use, using the straight-line basis over the estimated useful life of the software, which is generally 3 years.

Investments in Privately Held Companies

The Company determines whether its investments in privately held companies are debt or equity based on their characteristics, in accordance with the applicable accounting guidance for such investments. The Company also evaluates the investee to determine if the entity is a variable interest entity (“VIE”) and, if so, whether the Company is the primary beneficiary of the VIE, in order to determine whether consolidation of the VIE is required. If consolidation is not required and the Company owns less than 50.1% of the voting interest of the entity, the investment is evaluated to determine if the equity method of accounting should be applied. The equity method applies to investments in common stock or in substance common stock where the Company exercises significant influence over the investee.
Prior to January 1, 2018, if the equity method did not apply, investments in privately held companies determined to be equity securities were accounted for using the cost method. As discussed below, on January 1, 2018, the Company adopted ASU No. 2016-01, *Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities*, which changed the way it accounts for non-marketable securities. The Company adjusts the carrying value of its non-marketable equity securities for changes from observable transactions for identical or similar investments of the same issuer, less impairment. All gains and losses on non-marketable equity securities, realized and unrealized, are recognized in other income (expense), net in the consolidated statements of operations.

Investments in privately held companies determined to be debt securities are accounted for as available-for-sale or held to maturity securities, in accordance with the applicable accounting guidance for such investments.

**Derivative Financial Instruments**

The Company hedges a portion of its foreign currency exposures related to outstanding monetary assets and liabilities using foreign currency forward contracts. The foreign currency forward contracts, included in prepaid expenses and other current assets or in accrued liabilities, depending on the contracts’ net position, the Company uses to hedge the exposure are not designated as hedges, and as a result, changes in their fair value are recorded in other income (expense). As of December 31, 2019, the Company had open foreign currency forward contracts with notional amounts of $17.9 million. The Company’s foreign exchange derivative instruments are classified as Level 2 within the fair value hierarchy as they are valued using inputs that are observable in the market or can be derived principally from or corroborated by observable market data. The fair value of the foreign currency forward contracts was $0 at December 31, 2019. As of December 31, 2018, the Company had no open foreign currency forward contracts.

**Intangible Assets**

Intangible assets consisted of the following:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intangible assets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finite-lived intangible assets</td>
<td>$963,690</td>
<td>$33,058</td>
</tr>
<tr>
<td>Less: Accumulated amortization</td>
<td>(20,411)</td>
<td>(4,107)</td>
</tr>
<tr>
<td>Finite-lived intangible assets, net</td>
<td>943,279</td>
<td>28,951</td>
</tr>
<tr>
<td>In-process research and development</td>
<td>200,000</td>
<td>—</td>
</tr>
<tr>
<td>Internally developed technology in process</td>
<td>271</td>
<td>51</td>
</tr>
<tr>
<td>Intangible assets, net</td>
<td>$1,143,550</td>
<td>$29,002</td>
</tr>
</tbody>
</table>

**Finite-Lived Intangible Assets**

The following table summarizes the net-book-value and estimated remaining life of the Company’s finite-lived intangible assets as of December 31, 2019:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Net Balance at December 31, 2019</th>
<th>Weighted Average Remaining Life (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade name</td>
<td>$99,739</td>
<td>15.9</td>
</tr>
<tr>
<td>Customer relationships</td>
<td>2,476</td>
<td>13.8</td>
</tr>
<tr>
<td>Patents</td>
<td>16,715</td>
<td>8.8</td>
</tr>
<tr>
<td>Supply agreements</td>
<td>29,429</td>
<td>7.5</td>
</tr>
<tr>
<td>Acquired developed technology</td>
<td>794,027</td>
<td>9.9</td>
</tr>
<tr>
<td>Internally developed technology</td>
<td>893</td>
<td>2.5</td>
</tr>
<tr>
<td>Total</td>
<td>$943,279</td>
<td></td>
</tr>
</tbody>
</table>
As of December 31, 2019, the estimated future amortization expense associated with the Company’s finite-lived intangible assets for each of the five succeeding fiscal years is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amortization Expense (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$93,610</td>
</tr>
<tr>
<td>2021</td>
<td>93,508</td>
</tr>
<tr>
<td>2022</td>
<td>93,302</td>
</tr>
<tr>
<td>2023</td>
<td>93,159</td>
</tr>
<tr>
<td>2024</td>
<td>92,825</td>
</tr>
<tr>
<td>Thereafter</td>
<td>476,875</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$943,279</strong></td>
</tr>
</tbody>
</table>

Patent costs are capitalized as incurred, only if the Company determines that there is some probable future economic benefit derived from the transaction. A capitalized patent is amortized over its estimated useful life, beginning when such patent is approved. Capitalized patent costs are expensed upon disapproval, upon a decision by the Company to no longer pursue the patent or when the related intellectual property is either sold or deemed to be no longer of value to the Company. Other than the transactions discussed below, the Company determined that all patent costs incurred during the years ended December 31, 2019, 2018 and 2017 should be expensed and not capitalized as the future economic benefit derived from the transactions cannot be determined.

Under a technology license and royalty agreement entered into with MDx Health (“MDx”), dated July 26, 2010 (as subsequently amended, the “MDx License Agreement”), the Company was required to pay MDx milestone-based royalties on sales of products or services covered by the licensed intellectual property. Once the achievement of a milestone occurred or was considered probable, an intangible asset and corresponding liability was reported in intangible assets and accrued liabilities, respectively. The liability was relieved once the milestone was achieved and payment made. The intangible asset is being amortized over the estimated 10-year useful life of the licensed intellectual property through 2024, and such amortization is reported in amortization of acquired intangibles. Payment for all remaining milestones under the License Agreement was made as part of the Royalty Buy-out agreement outlined below.

Effective April 2017, the Company and MDx entered into a royalty buy-out agreement (“Royalty Buy-Out Agreement”), which terminated the MDx License Agreement. Pursuant to the Royalty Buy-Out Agreement, the Company paid MDx a one-time fee of $8.0 million in exchange for an assignment of certain patents covered by the MDx License Agreement and the elimination of all ongoing royalties and other payments by the Company to MDx under the MDx License Agreement. Also included in the Royalty Buy-Out Agreement is a mutual release of liabilities, which includes all amounts previously accrued under the MDx License Agreement. Concurrently with entering into the Royalty Buy-Out Agreement, the Company entered into a patent purchase agreement (“Patent Purchase Agreement”) with MDx under which it paid MDx an additional $7.0 million in exchange for the assignment of certain other patent rights that were not covered by the MDx License Agreement. The total $15.0 million paid by the Company pursuant to the Royalty Buy-Out Agreement and Patent Purchase Agreement, net of liabilities relieved of $6.6 million, was recorded as an intangible asset and is being amortized over the estimated remaining useful life of the licensed intellectual property through 2024, and such amortization is reported in amortization of acquired intangibles on the consolidated statements of operations. The $6.6 million of liabilities relieved were related to historical milestones and accrued royalties under the License Agreement.

As of December 31, 2019 and 2018, an intangible asset of $6.4 million and $7.7 million, respectively, related to historical milestone payments made under the MDx License Agreement and intangible assets acquired as part of the Royalty Buy-Out Agreement and Patent Purchase Agreement is reported in intangible assets, net. Amortization expense for the years ended December 31, 2019, 2018, and 2017 was $1.3 million, $1.3 million, and $1 million, respectively.

In December 2017, the Company entered into an asset purchase agreement (the “Armune Purchase Agreement”) with Armune BioScience, Inc. (“Armune”), pursuant to which the Company acquired intellectual property and certain other assets underlying Armune’s APIFINY®, APIFINY® PRO and APIFINY® ACTIVE SURVEILLANCE prostate cancer diagnostic tests. The portfolio of Armune assets the Company acquired is expected to complement its product pipeline. The total consideration was comprised of an up-front cash payment of $12.0 million and $17.5 million in contingent payment obligations that will become payable upon the Company’s achievement of development and commercial milestones using the acquired intellectual property. The satisfaction of these milestones is subject to many risks and is therefore uncertain. The Company will not record the contingent consideration until it is probable that the milestones will be met. There is no other
consideration due to Armune beyond the milestone payments and the Company is not subject to future royalty obligations should a product be developed and commercialized. The transaction costs directly related to the asset acquisition were added to the asset in accordance with GAAP. As such, the collective asset value from the acquisition resulted in an intangible asset of $12.2 million. The intellectual property asset, which includes related transaction costs, is being amortized on a straight-line basis over the period the Company expects to be benefited, which is consistent with the legal life of the patents acquired. For the years ended December 31, 2019, 2018, and 2017 the Company recorded amortization expense of $0.9 million, $0.9 million, and $40,000, respectively, which is included in amortization of acquired intangibles on the consolidated statements of operations. At December 31, 2019 and 2018, the net balances of $10.4 million and $11.3 million, respectively are reported in intangible assets, net in the Company’s consolidated balance sheets.

As a result of the Biomatrica Acquisition discussed in Note 13, the Company recorded an intangible asset of $8.8 million which was comprised of acquired developed technology of $5.4 million, customer relationships of $2.7 million, and trade names of $0.7 million. The intangible assets acquired are being amortized over the remaining useful life which was determined to be 15 years for the acquired developed technology, customer relationships, and trade names. For the years ended December 31, 2019, 2018, and 2018, the Company recorded amortization expense of $0.6 million and $0.1 million, respectively, which is included in amortization of acquired intangibles on the consolidated statements of operations. At December 31, 2019 and 2018, the net balances of $8.1 million and $8.7 million, respectively, are reported in intangible assets, net in the Company’s consolidated balance sheets.

As a result of the combination with Genomic Health discussed in Note 13, the Company recorded intangible assets of $1.1 billion which was comprised of acquired developed technology of $800.0 million, in-process research and development of $200.0 million, trade names of $100.0 million, and supply agreement of $30.0 million. The intangible assets acquired are being amortized over the remaining useful life which was determined to be 10 years for the acquired developed technology, 16 years for the trade names, and 7.6 years for the supply agreement. For the year ended December 31, 2019, the Company recorded amortization expense of $13.0 million, which is included in amortization of acquired intangibles on the consolidated statement of operations, and the net balance of $1.1 billion is reported in net intangible assets in the Company’s consolidated balance sheet.

**Acquired In-process Research and Development (IPR&D)**

Acquired IPR&D represents the fair value assigned to research and development assets that have not reached technological feasibility. The value assigned to acquired IPR&D is determined by estimating the costs to develop the acquired technology into commercially viable products, estimating the resulting revenues from the projects and discounting the net cash flows to present value. The revenues and costs projections used to value acquired IPR&D are, as applicable, reduced based on the probability of success. IPR&D projects acquired in a business combination that are not complete are capitalized and accounted for as indefinite-lived intangible assets until completion or abandonment of the related R&D efforts. Upon successful completion of the project, the capitalized amount is amortized over its estimated useful life. If a project is abandoned, all remaining capitalized amounts are written off immediately. There are often major risks and uncertainties associated with IPR&D projects as we are required to obtain regulatory approvals in order to be able to market the resulting products. Such approvals require completing clinical trials that demonstrate the products effectiveness. Consequently, the eventual realized value of the IPR&D project may vary from its fair value at the date of acquisition, and IPR&D impairment charges may occur in future periods.

Capitalized IPR&D projects are tested for impairment annually and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. The Company considers various factors for potential impairment, including the current legal and regulatory environment and the competitive landscape. Adverse clinical trial results, significant delays in obtaining marketing approval, the inability to bring a product to market and the introduction or advancement of competitors' products could result in partial or full impairment of the related intangible assets.

**Goodwill**

In 2017, the Company recognized goodwill of $2.0 million from the acquisition of Sampleminded, Inc. In 2018, the Company recognized goodwill of $15.3 million from the acquisition of Biomatrica, Inc. In November 2019, the Company recognized goodwill of $1.2 billion from the combination with Genomic Health. Refer to Note 13 for further discussion of the goodwill recorded.
The Company evaluates goodwill for possible impairment in accordance with ASC 350 on an annual basis during the fourth quarter, or more frequently if events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Qualitative factors considered in this assessment include industry and market conditions, overall financial performance, and other relevant events and factors affecting the Company's business. Based on the qualitative assessment, if it is determined that the fair value of goodwill is more likely than not to be less than its carrying amount, the fair value of a reporting unit will be calculated and compared with its carrying amount and an impairment charge will be recognized for the amount that the carrying value exceeds the fair value. There were no impairment losses for the years ended December 31, 2019, 2018, and 2017.

The change in the carrying amount of goodwill for the years ended December 31, 2019 and 2018 is as follows:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31, 2018</th>
<th>December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balance, January 1, 2018</td>
<td>$ 1,979</td>
<td>$ 1,203,197</td>
</tr>
<tr>
<td>Biomatrica acquisition</td>
<td>15,300</td>
<td></td>
</tr>
<tr>
<td>Balance, December 31, 2018</td>
<td>17,279</td>
<td></td>
</tr>
<tr>
<td>Genomic Health acquisition</td>
<td>1,185,918</td>
<td></td>
</tr>
<tr>
<td>Balance, December 31, 2019</td>
<td></td>
<td>1,203,197</td>
</tr>
</tbody>
</table>

**Impairment of Long-Lived Assets**

The Company evaluates the fair value of long-lived assets, which include property and equipment, intangible assets, and investments in privately held companies, for impairment whenever events or changes in circumstances indicate that the carrying amounts of the assets may not be fully recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. There were no impairment losses for the years ended December 31, 2019, 2018, and 2017.

**Net Loss Per Share**

Basic net loss per common share was determined by dividing net loss applicable to common stockholders by the weighted average common shares outstanding during the period. Basic and diluted net loss per share is the same because all outstanding common stock equivalents have been excluded, as they are anti-dilutive as a result of the Company’s losses.

The following potentially issuable common shares were not included in the computation of diluted net loss per share because they would have an anti-dilutive effect due to net losses for each period:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares issuable upon exercise of stock options</td>
<td>2,700</td>
<td>2,532</td>
<td>3,360</td>
</tr>
<tr>
<td>Shares issuable upon the release of restricted stock awards</td>
<td>4,384</td>
<td>6,246</td>
<td>6,149</td>
</tr>
<tr>
<td>Shares issuable upon conversion of convertible notes</td>
<td>12,196</td>
<td>12,044</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>19,280</td>
<td>20,822</td>
<td>9,509</td>
</tr>
</tbody>
</table>

**Accounting for Stock-Based Compensation**

The Company requires all share-based payments to employees, including grants of employee stock options, restricted stock, restricted stock units and shares purchased under an employee stock purchase plan (if certain parameters are not met), to be recognized in the financial statements based on their grant date fair values.
Revenue Recognition

The Company’s revenue is primarily generated by its laboratory testing services utilizing its Cologuard and Oncotype DX tests. The services are completed upon delivery of a patient’s test result to the ordering healthcare provider. The Company accounts for revenue in accordance with Accounting Standards Codification (“ASC”) Topic 606, Revenue from Contracts with Customers (“ASC 606”), which was adopted on January 1, 2018, using the modified retrospective method, which was elected to apply to all contracts. Application of the modified retrospective method did not impact amounts previously reported by the Company, nor did it require a cumulative effect adjustment upon adoption, as the Company’s method of recognizing revenue under ASC 606 was analogous to the method utilized immediately prior to adoption. Accordingly, there is no need for the Company to disclose the amount by which each financial statement line item was affected as a result of applying the new standard and an explanation of significant changes.

The core principle of ASC 606 is that the Company recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. The Company recognizes revenues from its products in accordance with that core principle, and key aspects considered by the Company include the following:

Contracts

The Company’s customer is the patient. However, the Company does not enter into a formal reimbursement contract with a patient, as formal reimbursement contracts are established with payers. Accordingly, the Company establishes a contract with a patient in accordance with other customary business practices.

• Approval of a contract is established via the order submitted by the patient’s healthcare provider and the receipt of a sample in the laboratory.
• The Company is obligated to perform its laboratory services upon acceptance of a sample from a patient, and the patient and/or applicable payer are obligated to reimburse the Company for services rendered based on the patient’s insurance benefits.
• Payment terms are a function of a patient’s existing insurance benefits, including the impact of coverage decisions with CMS and any applicable reimbursement contracts established between the Company and payers, unless the patient is a self-pay patient, whereby the Company requires payment from the patient prior to commencement of the Company’s performance obligations.
• Once the Company releases a patient’s test result to the ordering healthcare provider, the Company is legally able to collect payment and bill an insurer, patient and/or health system, depending on payer contract status or patient insurance benefit status.
• The Company’s consideration is deemed to be variable, and the Company considers collection of such consideration to be probable to the extent that it is unconstrained.

Performance obligations

A performance obligation is a promise in a contract to transfer a distinct good or service (or a bundle of goods or services) to the customer. The Company’s contracts have a single performance obligation, which is satisfied upon rendering of services, which culminates in the release of a patient’s test result to the ordering healthcare provider. The Company elects the practical expedient related to disclosure of unsatisfied performance obligations, as the duration of time between sample receipt and the release of a valid test result to the ordering healthcare provider is far less than one year.

Transaction price

The transaction price is the amount of consideration that the Company expects to collect in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties (for example, some sales taxes). The consideration expected from a contract with a customer may include fixed amounts, variable amounts, or both.

The consideration derived from the Company’s contracts is deemed to be variable due to several factors such as the amount of contractual adjustments, any patient co-payments, deductibles or patient adherence incentives, the existence of secondary payers, and claim denials.
The Company estimates the amount of variable consideration using the expected value method, which represents the sum of probability-weighted amounts in a range of possible consideration amounts. When estimating the amount of variable consideration, the Company considers several factors, such as historical collections experience, patient insurance eligibility and payer reimbursement contracts.

The Company limits the amount of variable consideration included in the transaction price to the unconstrained portion of such consideration. In other words, the Company recognizes revenue up to the amount of variable consideration that is not subject to a significant reversal until additional information is obtained or the uncertainty associated with the additional payments or refunds is subsequently resolved. Differences between original estimates and subsequent revisions, including final settlements, represent changes in the estimate of variable consideration and are included in the period in which such revisions are made. Revenue recognized from changes in transaction prices was $9.9 million and $15.0 million for the years ended December 31, 2019 and 2018, respectively.

The Company monitors its estimates of transaction price to depict conditions that exist at each reporting date. If the Company subsequently determines that it will collect more consideration than it originally estimated for a contract with a patient, it will account for the change as an increase in the estimate of the transaction price (i.e., an upward revenue adjustment) in the period identified. Similarly, if the Company subsequently determines that the amount it expects to collect from a patient is less than it originally estimated, it will generally account for the change as a decrease in the estimate of the transaction price (i.e., a downward revenue adjustment), provided that such downward adjustment does not result in a significant reversal of cumulative revenue recognized.

When the Company does not have significant historical experience or that experience has limited predictive value, the constraint over estimates of variable consideration may result in no revenue being recognized upon release of the performance obligations associated with the Company's tests, with recognition, generally occurring at the date of cash receipt.

Allocate transaction price

The transaction price is allocated entirely to the performance obligation contained within the contract with a patient.

Point in time recognition

The Company’s single performance obligation is satisfied at a point in time, and that point in time is defined as the date a patient’s successful test result is released to the patient’s ordering healthcare provider. The Company considers this date to be the time at which the patient obtains control of the promised test service.
Disaggregation of Revenue

The following table presents the Company's revenues disaggregated by revenue source:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Screening</td>
<td></td>
</tr>
<tr>
<td>Medicare Parts B &amp; C</td>
<td>$404,331</td>
</tr>
<tr>
<td>Commercial</td>
<td>368,006</td>
</tr>
<tr>
<td>Other</td>
<td>37,783</td>
</tr>
<tr>
<td>Total Screening</td>
<td>810,120</td>
</tr>
<tr>
<td>Precision Oncology</td>
<td></td>
</tr>
<tr>
<td>Medicare Parts B &amp; C</td>
<td>$24,325</td>
</tr>
<tr>
<td>Commercial</td>
<td>29,976</td>
</tr>
<tr>
<td>International</td>
<td>11,444</td>
</tr>
<tr>
<td>Other</td>
<td>428</td>
</tr>
<tr>
<td>Total Precision Oncology</td>
<td>66,173</td>
</tr>
<tr>
<td>Total</td>
<td>$876,293</td>
</tr>
</tbody>
</table>

Screening includes laboratory service revenue from Cologuard and revenue from Biomatrica products. Precision Oncology includes laboratory service revenue from global Oncotype DX products.

Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable and deferred revenue on the consolidated balance sheets. Generally, billing occurs subsequent to the release of a patient’s test result to the ordering healthcare provider, resulting in an account receivable. However, the Company sometimes receives advance payment from a patient, particularly a self-pay patient, before a test result is completed, resulting in deferred revenue. The deferred revenue balance is relieved upon release of the applicable patient’s test result to the ordering healthcare provider. As of December 31, 2019 and 2018, the deferred revenue balance is not material to the Company's consolidated financial statements.

Practical Expedients

The Company does not adjust the transaction price for the effects of a significant financing component, as at contract inception, the Company expects the collection cycle to be one year or less.

The Company incurs certain other costs that are incurred regardless of whether a contract is obtained. Such costs are primarily related to legal services and patient communications (e.g. adherence reminder letters). These costs are expensed as incurred and recorded within general and administrative expenses in the Company's consolidated statements of operations.

Advertising Costs

The Company incurs certain other costs that are incurred regardless of whether a contract is obtained. Such costs are primarily related to legal services and patient communications (e.g. adherence reminder letters). These costs are expensed as incurred and recorded within general and administrative expenses in the Company's consolidated statements of operations.
Fair Value Measurements

The FASB has issued authoritative guidance that requires fair value to be based on the assumptions market participants would use when pricing an asset or liability and establishes a fair value hierarchy that prioritizes the information used to develop those assumptions. Under that standard, fair value measurements are separately disclosed by level within the fair value hierarchy. The fair value hierarchy establishes and prioritizes the inputs used to measure fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs. Observable inputs are inputs that reflect the assumptions that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company’s assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

The three levels of the fair value hierarchy established are as follows:

Level 1 Quoted prices (unadjusted) in active markets for identical assets or liabilities that the Company has the ability to access as of the reporting date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 Pricing inputs other than quoted prices in active markets included in Level 1, which are either directly or indirectly observable as of the reporting date. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active.

Level 3 Unobservable inputs that reflect the Company’s assumptions about the assumptions that market participants would use in pricing the asset or liability. Unobservable inputs shall be used to measure fair value to the extent that observable inputs are not available.

The Company's available-for-sale debt securities are classified as Level 2. They are valued using a third-party pricing agency where the valuation is based on observable inputs including pricing for similar assets and other observable market factors. The Company's marketable equity securities are classified as Level 1. There were no transfers between Level 1 and Level 2 categories during the year ended December 31, 2019. The fair value of contingent consideration related to the Biomatrica Acquisition was categorized as a Level 3 liability, as the measurement amount is based primarily on significant inputs not observable in the market. The Company evaluates the fair value of expected contingent consideration and the corresponding liability each annual reporting period using the Monte Carlo Method, which is consistent with the initial measurement of the expected Biomatrica Acquisition earn-out liability. This fair value measurement is considered a Level 3 measurement because the Company estimates projections during the earn-out period utilizing various potential pay-out scenarios. Probabilities were applied to each potential scenario and the resulting values were discounted using a rate that considers weighted average cost of capital as well as a specific risk premium associated with the riskiness of the earn-out itself, the related projections, and the overall business. The contingent earn-out liability is classified as a component of other long-term liabilities in the Company’s consolidated balance sheets. The change in the fair value between the acquisition date and December 31, 2019 was due to an earn-out payment made during that time resulting in a decrease in the liability at December 31, 2019. See Note 13 for further detail on the Biomatrica Acquisition. Of the Company's non-marketable equity investments, $10.8 million is related to the preferred stock investment in Epic Sciences and is categorized as a Level 3 asset in the fair value hierarchy because the value is estimated using an option pricing model that considered a recent observable transaction and other unobservable inputs including volatility and long-term plan of Epic Sciences. There were no changes to the fair value based on observable transactions during the period end from the combination date to December 31, 2019 utilizing the option pricing model discussed above. See Note 6, for additional information regarding the terms of this investment.
The following table presents the Company’s fair value measurements as of December 31, 2019 along with the level within the fair value hierarchy in which the fair value measurements, in their entirety, fall.

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Fair value at December 31, 2019</th>
<th>Fair Value Measurement at December 31, 2019 Using:</th>
<th>Quoted Prices in Active Markets for Identical Assets (Level 1)</th>
<th>Significant Other Observable Inputs (Level 2)</th>
<th>Significant Unobservable Inputs (Level 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash, cash equivalents, and restricted cash</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and money market</td>
<td>$146,932</td>
<td></td>
<td>$146,932</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>30,322</td>
<td></td>
<td>—</td>
<td>$30,322</td>
<td>—</td>
</tr>
<tr>
<td>Restricted cash</td>
<td>274</td>
<td></td>
<td>274</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Marketable securities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>4,003</td>
<td></td>
<td>—</td>
<td>4,003</td>
<td>—</td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>140,682</td>
<td></td>
<td>—</td>
<td>140,682</td>
<td>—</td>
</tr>
<tr>
<td>Equity securities</td>
<td>1,716</td>
<td></td>
<td>1,716</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Non-marketable equity investments</td>
<td>11,821</td>
<td></td>
<td>—</td>
<td>—</td>
<td>11,821</td>
</tr>
<tr>
<td>Contingent consideration</td>
<td>(2,879)</td>
<td></td>
<td>—</td>
<td>—</td>
<td>(2,879)</td>
</tr>
<tr>
<td>Total</td>
<td>$332,871</td>
<td></td>
<td>$148,922</td>
<td>$175,007</td>
<td>$8,942</td>
</tr>
</tbody>
</table>

The following table presents the Company’s fair value measurements as of December 31, 2018 along with the level within the fair value hierarchy in which the fair value measurements, in their entirety, fall.

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Fair Value at December 31, 2018</th>
<th>Fair Value Measurement at December 31, 2018 Using:</th>
<th>Quoted Prices in Active Markets for Identical Assets (Level 1)</th>
<th>Significant Other Observable Inputs (Level 2)</th>
<th>Significant Unobservable Inputs (Level 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash and money market</td>
<td>$75,375</td>
<td></td>
<td>$75,375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>49,985</td>
<td></td>
<td>—</td>
<td>49,985</td>
<td>—</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>24,070</td>
<td></td>
<td>—</td>
<td>24,070</td>
<td>—</td>
</tr>
<tr>
<td>Certificates of deposit</td>
<td>11,000</td>
<td></td>
<td>—</td>
<td>—</td>
<td>11,000</td>
</tr>
<tr>
<td>Marketable securities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>392,287</td>
<td></td>
<td>—</td>
<td>392,287</td>
<td>—</td>
</tr>
<tr>
<td>Asset backed securities</td>
<td>276,999</td>
<td></td>
<td>—</td>
<td>276,999</td>
<td>—</td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>250,471</td>
<td></td>
<td>—</td>
<td>250,471</td>
<td>—</td>
</tr>
<tr>
<td>Certificates of deposit</td>
<td>31,844</td>
<td></td>
<td>—</td>
<td>31,844</td>
<td>—</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>12,151</td>
<td></td>
<td>—</td>
<td>12,151</td>
<td>—</td>
</tr>
<tr>
<td>Contingent consideration</td>
<td>(3,060)</td>
<td></td>
<td>—</td>
<td>—</td>
<td>(3,060)</td>
</tr>
<tr>
<td>Total</td>
<td>$1,121,122</td>
<td></td>
<td>$75,375</td>
<td>$1,048,807</td>
<td>—</td>
</tr>
</tbody>
</table>

The Company evaluates investments including investments in privately-held companies for other-than-temporary impairment. It was determined that unrealized gains and losses at December 31, 2019, 2018, and 2017 are temporary in nature because the change in market value for those securities resulted from fluctuating interest rates rather than a deterioration of the credit worthiness of the issuers. So long as the Company holds these securities to maturity, it is unlikely to experience gains or losses. In the event that the Company disposes of these securities before maturity, it is expected that realized gains or losses, if any, will be immaterial.
The following table summarizes the gross unrealized losses and fair values of available-for-sale debt securities in an unrealized loss position as of December 31, 2019, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31, 2019</th>
<th>Less than 12 months</th>
<th>12 months or greater</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fair Value</td>
<td>Gross Unrealized Loss</td>
<td>Fair Value</td>
<td>Gross Unrealized Loss</td>
</tr>
<tr>
<td>Marketable securities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>$4,003</td>
<td>$(14)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>$140,682</td>
<td>$(73)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total</td>
<td>$144,685</td>
<td>$(87)</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

The following table summarizes the gross unrealized losses and fair value of available-for-sale debt securities in an unrealized loss position as of December 31, 2018, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31, 2018</th>
<th>Less than 12 months</th>
<th>12 months or greater</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fair Value</td>
<td>Gross Unrealized Loss</td>
<td>Fair Value</td>
<td>Gross Unrealized Loss</td>
</tr>
<tr>
<td>Cash equivalents</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial paper</td>
<td>$24,070</td>
<td>$(2)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total cash equivalents</td>
<td>24,070</td>
<td>(2)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Marketable Securities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>$340,287</td>
<td>$(638)</td>
<td>$35,773</td>
<td>$(81)</td>
</tr>
<tr>
<td>Asset backed securities</td>
<td>201,036</td>
<td>(178)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>243,846</td>
<td>(501)</td>
<td>18,335</td>
<td>(67)</td>
</tr>
<tr>
<td>Certificates of deposit</td>
<td>31,843</td>
<td>(31)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Commercial paper</td>
<td>12,151</td>
<td>(7)</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Total marketable securities</td>
<td>829,163</td>
<td>(1,355)</td>
<td>54,108</td>
<td>(148)</td>
</tr>
<tr>
<td>Total</td>
<td>$853,233</td>
<td>(1,357)</td>
<td>54,108</td>
<td>(148)</td>
</tr>
</tbody>
</table>

The following table summarizes contractual underlying maturities of the Company’s available-for-sale debt securities at December 31, 2019:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31, 2019</th>
<th>Due one year or less</th>
<th>Due after one year through four years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cost</td>
<td>Fair Value</td>
<td>Cost</td>
</tr>
<tr>
<td>Cash equivalents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>$30,320</td>
<td>$30,321</td>
<td>—</td>
</tr>
<tr>
<td>Total cash equivalents</td>
<td>30,320</td>
<td>30,321</td>
<td>—</td>
</tr>
<tr>
<td>Marketable securities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. government agency securities</td>
<td>140,745</td>
<td>140,682</td>
<td>—</td>
</tr>
<tr>
<td>Corporate bonds</td>
<td>4,017</td>
<td>4,003</td>
<td>—</td>
</tr>
<tr>
<td>Total marketable securities</td>
<td>144,762</td>
<td>144,685</td>
<td>—</td>
</tr>
<tr>
<td>Total available-for-sale securities</td>
<td>$175,082</td>
<td>$175,006</td>
<td>—</td>
</tr>
</tbody>
</table>
Fair Value of Long-Term Debt and Convertible Notes

The Company measures the fair value of its convertible notes and long-term debt for disclosure purposes. The following table summarizes the Company’s outstanding convertible notes and long-term debt:

<table>
<thead>
<tr>
<th></th>
<th>December 31, 2019</th>
<th></th>
<th>December 31, 2018</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carrying Amount (1)</td>
<td>Fair Value</td>
<td>Carrying Amount (1)</td>
<td>Fair Value</td>
</tr>
<tr>
<td>2027 Convertible notes (2)</td>
<td>$483,909</td>
<td>$843,741</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2025 Convertible notes (2)</td>
<td>319,696</td>
<td>592,482</td>
<td>664,749</td>
<td>956,196</td>
</tr>
<tr>
<td>Construction loan (3)</td>
<td>24,866</td>
<td>24,866</td>
<td>24,502</td>
<td>24,502</td>
</tr>
</tbody>
</table>

(1) The carrying amounts presented are net of debt discounts and debt issuance costs (See Note 8 and Note 9 of the consolidated financial statements for further information).

(2) The fair values are based on observable market prices for this debt, which are traded in active markets and therefore are classified as a Level 2 fair value measurement. A portion of the 2025 convertible notes were settled in 2019 resulting in a decrease in the liability.

(3) The carrying amount of the construction loan approximates fair value due to the short-term nature of this instrument. The construction loan is privately held with no public market for this debt and therefore is classified as a Level 3 fair value measurement. The change in the fair value was due to payments made on the loan resulting in a decrease in the liability.

Concentration of Credit Risk

Financial instruments that subject the Company to credit risk consist of cash, cash equivalents and marketable securities. As of December 31, 2019, the Company had cash and cash equivalents deposited in financial institutions in which the balances exceed the federal government agency insured limit of $250,000 by approximately $145.6 million. The Company has not experienced any losses in such accounts and management believes it is not exposed to any significant credit risk.

Through December 31, 2019, the Company’s revenues have been primarily derived from the sale of Cologuard and Oncotype DX tests. The following is a breakdown of revenue and accounts receivable from major payers:

<table>
<thead>
<tr>
<th>Major Payer</th>
<th>% Revenue for the years ended December 31,</th>
<th>% Accounts Receivable at December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centers for Medicare and Medicaid Services</td>
<td>29%</td>
<td>36%</td>
</tr>
<tr>
<td>UnitedHealthcare</td>
<td>13%</td>
<td>13%</td>
</tr>
</tbody>
</table>

Tax Positions

A valuation allowance to reduce the deferred tax assets is reported if, based on the weight of the evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The Company has incurred significant losses since its inception and due to the uncertainty of the amount and timing of future taxable income, the Company has determined that a $120.7 million and $209.9 million valuation allowance at December 31, 2019 and 2018 is necessary to reduce the tax assets to the amount that is more likely than not to be realized. The change in valuation allowance as of December 31, 2019 and 2018 was a decrease of $89.2 million and $4.4 million, respectively. An income tax benefit of $185.1 million was recorded as a result of a change in the deferred tax asset valuation allowance resulting from the Genomic Health combination. In connection with the Genomic Health combination, a deferred tax liability was recorded for identified intangible assets. These deferred tax liabilities are considered a source of future taxable income which allowed the Company to reduce its pre-combination deferred tax asset valuation allowance. The change in pre-combination deferred tax asset valuation allowance of an acquirer is a transaction recognized separate from the business combination and reduces income tax expense in the period of the business combination. Due to the existence of the valuation allowance, future changes in our unrecognized tax benefits will not impact our effective tax rate.
Subsequent Events

The Company evaluates events that occur through the filing date and discloses those events or transactions that provide additional evidence with respect to conditions that existed at the date of the balance sheet. In addition, the financial statements are adjusted for any changes in estimates resulting from the use of such evidence.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In February 2016, the Financial Accounting Standards Board issued ASU No. 2016-02, Leases (Topic 842) and subsequent amendments to the initial guidance: ASU 2017-13, ASU 2018-10, ASU 2018-20 and ASU 2019-01, (collectively, “Update 2016-02”). Update 2016-02 requires recognition of right-of-use assets and lease liabilities on the balance sheet, including those leases classified as operating leases under previous GAAP. Update 2016-02 provides an option of recognizing a cumulative-effect adjustment to the opening balance of retained earnings upon adoption. The amendments in this update are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company adopted Update 2016-02 on January 1, 2019 using the modified retrospective method of adoption. The Company elected the package of practical expedients permitted under the transition guidance, including (i) not reassessing whether expired or existing contracts contain leases, (ii) not reassessing lease classification, and (iii) not revaluing initial direct costs for existing leases. As a result of the adoption, the Company recorded an opening right-of-use asset balance of $20.6 million, which is included in operating lease right-of-use assets in the Company’s consolidated financial statements. The Company also recorded an opening lease liability of $20.1 million, of which $3.0 million was classified in operating lease liabilities, current portion and $17.1 million was classified in operating lease liabilities, less current portion in the Company’s consolidated financial statements. See Note 6 for more detail.

In June 2018, the Financial Accounting Standards Board issued ASU No. 2018-07 (Topic 718), Improvements to Nonemployee Share-Based Payment Accounting, (“Update 2018-07”). Update 2018-07 expands the scope of Topic 718 to include share-based payment transactions for acquiring goods and services from nonemployees. An entity should apply the requirements of Topic 718 to nonemployee awards except for certain exemptions specified in the amendment. The guidance is effective for fiscal years beginning after December 15, 2018, including interim reporting periods within that fiscal year. Early adoption is permitted, but no earlier than an entity’s adoption of Topic 606. The Company adopted this guidance on January 1, 2019, and it did not have an impact on its consolidated financial statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In June 2016, the Financial Accounting Standards Board issued ASU No. 2016-13, Financial Instruments-Credit Losses: Measurement of Credit Losses on Financial Instruments (“Update 2016-13”). Update 2016-13 requires companies to measure all expected credit losses for financial instruments held at the reporting date based on historical experience, current conditions, and reasonable supportable forecasts. This replaces the existing incurred loss model and is applicable to the measurement of credit losses on financial assets, including trade receivables. The guidance is effective for fiscal years beginning after December 15, 2019 and will not have a material impact on the Company's consolidated financial statements.

In August 2018, the Financial Accounting Standards Board issued ASU 2018-13, Fair Value Measurement (Topic 820); Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement, (“Update 2018-13”). Update 2018-13 provided an update to the disclosure requirements for fair value measurements under the scope of ASC 820. The guidance is effective for fiscal years beginning after December 15, 2019 and will not have a material impact on the Company's consolidated financial statements.

In August 2018, the Financial Accounting Standards Board issued ASU 2018-15, Intangibles – Goodwill and Other – Internal-Use Software, (“Update 2018-15”). Update 2018-15 provided guidance for evaluating the accounting for fees paid by a customer in a cloud computing arrangement that is a service contract. The guidance is effective for fiscal years beginning after December 15, 2019 and will not have a material impact on the Company's consolidated financial statements.

In November 2018, the Financial Accounting Standards Board issued ASU 2018-18, Collaborative Arrangements (Topic 808), (“Update 2018-18”). Update 2018-18 provided additional guidance regarding the interaction between Topic 808 on Collaborative Arrangements and Topic 606 on Revenue Recognition. The guidance is effective for fiscal years beginning after December 15, 2019 and will not have a material impact on the Company's consolidated financial statements.
In April 2019, the Financial Accounting Standards Board issued ASU 2019-04, *Codification Improvements to Topic 326, Financial Instruments – Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments,* (“Update 2019-04”). Update 2019-04 represents changes to clarify, correct errors in, or improve the codification for these topics. The guidance is effective for fiscal years beginning after December 15, 2019 and will not have a material impact on the Company's consolidated financial statements.

In December 2019, the Financial Accounting Standards Board issued ASU No. 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes.* The update simplifies the accounting for income taxes through certain targeted improvements to various subtopics within Topic 740. The amendments in this update are effective for fiscal years and interim periods beginning after December 15, 2020. The Company is currently evaluating the impact of this guidance on its consolidated financial statements.

Guarantees and Indemnifications

The Company, as permitted under Delaware law and in accordance with its bylaws, indemnifies its officers and directors for certain events or occurrences, subject to certain limits, while the officer or director is or was serving at the Company’s request in such capacity. The term of the indemnification period is for the officer’s or director’s lifetime. The maximum amount of potential future indemnification is unlimited; however, the Company has a directors and officers insurance policy that limits its exposure and may enable it to recover a portion of any future amounts paid. The Company believes the fair value of these indemnification agreements is minimal. Accordingly, the Company has not recorded any liabilities for these agreements as of December 31, 2019 and 2018.

Foreign Currency Translation

In 2017 and 2018, the Company's international subsidiaries functional currency was the local currency and assets and liabilities were translated into United States dollars at the period-end exchange rate or historical rates, as appropriate. Consolidated statements of operations were translated at average exchange rates for the period, and the cumulative translation adjustments resulting from changes in exchange rates were included in the Company's consolidated balance sheet as a component of accumulated other comprehensive income (loss). In 2019 the Company’s international subsidiaries use the U.S. dollar as the functional currency, resulting in the Company not being subject to gains and losses from foreign currency translation of the subsidiary financial statements. Net foreign currency transaction gains (losses) were not significant for the years ended December 31, 2019, 2018, and 2017.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation in the consolidated financial statements and accompanying notes to the consolidated financial statements including the amortization of acquired intangible assets, which is now presented as a separate line item on the Company's consolidated statements of operations and was previously included in cost of sales, research and development, and general and administrative expenses. Due to these reclassifications, the Company is no longer presenting gross margin on the Company's consolidated statements of operations.
In June 2009, the Company entered into a license agreement with Mayo Foundation for Medical Education and Research (“Mayo”). The Company’s license agreement with Mayo was amended and restated in February 2015 and further amended in January 2016, October 2017 and January 2019. Under the license agreement, Mayo granted the Company an exclusive, worldwide license to certain Mayo patents and patent applications, as well as a non-exclusive, worldwide license with regard to certain Mayo know-how. The scope of the license covers any screening, surveillance or diagnostic test or tool for use in connection with any type of cancer, pre-cancer, disease or condition.

The licensed Mayo patents and patent applications contain both method and composition claims that relate to sample processing, analytical testing and data analysis associated with nucleic acid screening for cancers and other diseases. The jurisdictions covered by these patents and patent applications include the U.S., Australia, Canada, the European Union, China, Japan and Korea. Under the license agreement, the Company assumed the obligation and expense of prosecuting and maintaining the licensed Mayo patents and is obligated to make commercially reasonable efforts to bring to market products using the licensed Mayo intellectual property.

Pursuant to the Company’s agreement with Mayo, the Company is required to pay Mayo a low single-digit royalty on the Company’s net sales of products using the licensed Mayo intellectual property each year during the term of the Mayo agreement. The January 2016 amendment to the Mayo license agreement established various low-single-digit royalty rates on net sales of current and future products and clarified how net sales will be calculated. As part of the January 2016 and October 2017 amendments, the royalty rate on the Company's net sales of Cologuard increased but the rate remains a low-single-digit percentage of net sales.

In addition to the royalties described above, the Company is required pay Mayo cash of $0.2 million, $0.8 million and $2.0 million upon each product using the licensed Mayo intellectual property reaching $5.0 million, $20.0 million and $50.0 million in cumulative net sales, respectively.

As part of the February 2015 amendment and restatement of the license agreement, the Company agreed to pay Mayo an additional $5.0 million, payable in five annual installments, through 2019. The Company paid Mayo the annual installment of $1.0 million in the first quarter of each of 2015 through 2019.

The license agreement will remain in effect, unless earlier terminated by the parties in accordance with the agreement, until the last of the licensed patents expires in 2037 (or later, if certain licensed patent applications are issued). However, if the Company is still using the licensed Mayo know-how or certain Mayo-provided biological specimens or their derivatives on such expiration date, the term shall continue until the earlier of the date the Company stops using such know-how and materials and the date that is five years after the last licensed patent expires. The license agreement contains customary termination provisions and permits Mayo to terminate the license agreement if the Company sues Mayo or its affiliates, other than any such suit claiming an uncured material breach by Mayo of the license agreement.

In addition to granting the Company a license to the covered Mayo intellectual property, Mayo provides the Company with product development and research and development assistance pursuant to the license agreement and other collaborative arrangements. In connection with this collaboration, the Company incurred charges of $4.8 million, $4.5 million, and $3.8 million for the years ended December 31, 2019, 2018 and 2017, respectively. Certain of Mayo's obligations to provide development assistance expired in January 2020. The Company and Mayo are in discussions to amend the license agreement to extend that date.
(3) PFIZER PROMOTION AGREEMENT

In August 2018, the Company entered into a Promotion Agreement ("Promotion Agreement") with Pfizer, Inc. ("Pfizer"). Under the terms of the Promotion Agreement, Pfizer promotes Cologuard and provides certain sales, marketing, analytical and other commercial operations support. The Company agreed to pay Pfizer for promotion, sales and marketing costs incurred on behalf of the Company. The Company incurred charges of $68.9 million and $0.5 million for promotion, sales and marketing services performed by Pfizer on behalf of the Company during the years ended December 31, 2019 and 2018, respectively. These costs are recorded in sales and marketing in the Company’s consolidated statements of operations. The Company agreed to pay Pfizer a service fee based on incremental gross profits over specified baselines during the term of the Promotion Agreement and royalties for Cologuard related revenues for a specified period after the expiration or termination of the Promotion Agreement. The initial term of the Promotion Agreement runs through December 31, 2021. The Company incurred charges of $68.5 million and $4.8 million for the service fee during the years ended December 31, 2019 and 2018, respectively. These costs are recorded in sales and marketing in the Company’s consolidated statements of operations.

(4) ISSUANCES OF EQUITY

Underwritten Public Offerings

In June 2017, the Company completed an underwritten public offering of 7.5 million shares of common stock at a price of $35.00 per share to the public. The Company received, in the aggregate, approximately $253.4 million of net proceeds from the offering, after deducting $7.3 million for the underwriting discount and commissions and other stock issuance costs paid by the Company.

Convertible Notes Settlement Stock Issuance

In March 2019, the Company used cash of $494.0 million and an aggregate of 2.2 million shares of the Company’s common stock valued at $182.4 million for total consideration of $676.5 million to settle $493.4 million of the 2025 convertible notes. Refer to Note 9 for further discussion of this settlement transaction.

Genomic Health Combination Stock Issuance

In November 2019, the Company completed the combination with Genomic Health in a cash and stock transaction valued at approximately $2.5 billion. Of the $2.5 billion purchase price, approximately $1.4 billion was settled through the issuance of 17.0 million shares of common stock. The Company incurred $0.4 million in stock issuance costs as part of the transaction. Refer to Note 13 for further discussion of the consideration transferred as part of the combination with Genomic Health.

(5) STOCK-BASED COMPENSATION

Stock-Based Compensation Plans

The Company maintains the 2010 Omnibus Long-Term Incentive Plan (As Amended and Restated Effective July 27, 2017), the 2019 Omnibus Long-Term Incentive Plan, the 2010 Employee Stock Purchase Plan, the 2016 Inducement Award Plan and the 2000 Stock Option and Incentive Plan (collectively, the “Stock Plans”).

2000 Stock Option and Incentive Plan. The Company adopted the 2000 Stock Option and Incentive Plan (the “2000 Option Plan”) on October 17, 2000. The 2000 Option Plan expired October 17, 2010 and after such date no further awards could be granted under the plan. Under the terms of the 2000 Option Plan, the Company was authorized to grant incentive stock options, as defined under the Internal Revenue Code, non-qualified options, restricted stock awards and other stock awards to employees, officers, directors, consultants and advisors. Options granted under the 2000 Option Plan expire ten years from the date of grant. Grants made from the 2000 Option Plan generally vest over a period of three to four years.
The 2000 Option Plan was administered by the compensation committee of the Company’s board of directors, which selected the individuals to whom equity-based awards would be granted and determined the option exercise price and other terms of each award, subject to the provisions of the 2000 Option Plan. The 2000 Option Plan provides that upon an acquisition of the Company, all options to purchase common stock will accelerate by a period of one year. In addition, upon the termination of an employee without cause or for good reason prior to the first anniversary of the completion of the acquisition, all options then outstanding under the 2000 Option Plan held by that employee will immediately become exercisable. At December 31, 2019, there were 2,043,383 options outstanding under the 2000 Option Plan. There were no shares of restricted stock outstanding under the 2000 Option Plan.

2010 Omnibus Long-Term Incentive Plan. The Company adopted the 2010 Omnibus Long-Term Incentive Plan (the “2010 Stock Plan”) on July 16, 2010. The 2010 Stock Plan will expire on July 16, 2020 and after such date no further awards may be granted under the plan. Under the terms of the 2010 Stock Plan, the Company is authorized to grant incentive stock options, as defined under the Internal Revenue Code, non-qualified options, restricted stock awards and other stock awards to employees, officers, directors, consultants and advisors. Options granted under the 2010 Stock Plan expire ten years from the date of grant. Grants made from the 2010 Stock Plan generally vest over a period of three to four years.

The 2010 Stock Plan is administered by the compensation committee of the Company’s board of directors, which selects the individuals to whom equity-based awards will be granted and determines the option exercise price and other terms of each award, subject to the provisions of the 2010 Stock Plan. The 2010 Stock Plan provides that upon an acquisition of the Company, all equity will accelerate by a period of one year. In addition, upon the termination of an employee without cause or for good reason prior to the first anniversary of the completion of the acquisition, all equity awards then outstanding under the 2010 Stock Plan held by that employee will immediately vest. At December 31, 2019, options to purchase 2,043,383 shares were outstanding under the 2010 Stock Plan and 3,462,321 shares of restricted stock and restricted stock units were outstanding. At December 31, 2019, there were no shares available for future grant under the 2010 Stock Plan.

2019 Omnibus Long-Term Incentive Plan. The Company adopted the 2019 Omnibus Long-Term Incentive Plan (the “2019 Stock Plan”) on July 25, 2019. The 2019 Stock Plan will expire on July 25, 2029 and after such date no further awards may be granted under the plan. Under the terms of the 2019 Stock Plan, the Company is authorized to grant incentive stock options, as defined under the Internal Revenue Code, non-qualified options, restricted stock awards and other stock awards to employees, officers, directors, consultants and advisors. Options granted under the 2019 Stock Plan expire ten years from the date of grant. Grants made from the 2019 Stock Plan generally vest over a period of three to four years.

The 2019 Stock Plan is administered by the compensation committee of the Company’s board of directors, which selects the individuals to whom equity-based awards will be granted and determines the option exercise price and other terms of each award, subject to the provisions of the 2019 Stock Plan. The 2019 Stock Plan provides that upon an acquisition of the Company, all equity will accelerate by a period of one year. In addition, upon the termination of an employee without cause or for good reason prior to the first anniversary of the completion of the acquisition, all equity awards then outstanding under the 2019 Stock Plan held by that employee will immediately vest. At December 31, 2019, options to purchase 650,405 shares were outstanding under the 2019 Stock Plan and 3,560,301 shares of restricted stock and restricted stock units were outstanding. At December 31, 2019, there were 7,560,301 shares available for future grant under the 2019 Stock Plan.

2016 Inducement Award Plan. The Company adopted the 2016 Inducement Award Plan (the “2016 Inducement Plan”) on January 25, 2016. The 2016 Inducement Plan expired on July 27, 2017, and after such date no further awards could be granted under the plan. Under the terms of the 2016 Inducement Plan, the Company was authorized to grant incentive stock options, as defined under the Internal Revenue Code, non-qualified options, restricted stock awards and other stock awards to employees who were not previously an employee of the Company or any of its Subsidiaries. Options granted under the 2016 Inducement Plan expire ten years from the date of grant. Grants made from the 2016 Inducement Plan generally vest over a period of three to four years.

The 2016 Inducement Plan was administered by the compensation committee of the Company’s board of directors, which selected the individuals to whom equity-based awards would be granted and determined the option exercise price and other terms of each award, subject to the provisions of the 2016 Inducement Plan. The 2016 Inducement Plan provides that upon an acquisition of the Company, all equity will accelerate by a period of one year. In addition, upon termination of an employee without cause or for good reason prior to the first anniversary of the completion of the acquisition, all equity awards then outstanding under the 2016 Inducement Plan held by that employee will immediately vest. At December 31, 2019, there were 229,691 shares of restricted stock and restricted stock units outstanding under the 2016 Inducement Award Plan. At December 31, 2019, there were no shares available for future grant under the 2016 Inducement Plan.
**2010 Employee Stock Purchase Plan.** The 2010 Employee Stock Purchase Plan (the “2010 Purchase Plan”) was adopted by the Company on July 16, 2010. The 2010 Purchase Plan provides participating employees the right to purchase shares of common stock at a discount through a series of offering periods. The 2010 Purchase Plan will expire on October 31, 2030. On July 24, 2014, the Company’s stockholders approved an amendment to the 2010 Employee Stock Purchase Plan to increase the number of shares available for purchase thereunder by 500,000 shares. On July 28, 2016 the Company’s stockholders approved an amendment to the 2010 Employee Stock Purchase Plan to increase the number of shares available for purchase thereunder by 2,000,000 shares. At December 31, 2019, there were 1,879,636 shares of common stock available for purchase by participating employees under the 2010 Purchase Plan.

The compensation committee of the Company’s board of directors administers the 2010 Purchase Plan. Generally, all employees whose customary employment is more than 20 hours per week and more than five months in any calendar year are eligible to participate in the 2010 Purchase Plan. Participating employees authorize an amount, between 1 percent and 15 percent of the employee’s compensation, to be deducted from the employee’s pay during the offering period. On the last day of the offering period, the employee is deemed to have exercised the employee’s option to purchase shares of Company common stock, at the option exercise price, to the extent of accumulated payroll deductions. Under the terms of the 2010 Purchase Plan, the option exercise price is an amount equal to 85 percent of the fair market value, as defined under the 2010 Purchase Plan, and no employee can purchase more than $25,000 of Company common stock under the 2010 Purchase Plan in any calendar year. Rights granted under the 2010 Purchase Plan terminate upon an employee’s voluntary withdrawal from the 2010 Purchase Plan at any time or upon termination of employment. At December 31, 2019, there were 1,739,921 cumulative shares issued under the 2010 Purchase Plan, and 176,458 shares were issued in the year ended December 31, 2019, as follows:

<table>
<thead>
<tr>
<th>Offering period ended</th>
<th>Number of Shares</th>
<th>Weighted Average price per Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 30, 2019</td>
<td>93,591</td>
<td>$44.23</td>
</tr>
<tr>
<td>October 31, 2019</td>
<td>82,867</td>
<td>$51.51</td>
</tr>
</tbody>
</table>

**Stock-Based Compensation Expense**

The Company recorded approximately $108.5 million, $60.3 million, and $35.5 million in stock-based compensation expense during the years ended December 31, 2019, 2018, and 2017, respectively, in connection with the amortization of restricted stock and restricted stock unit awards, stock purchase rights granted under the Company’s employee stock purchase plan and stock options granted to employees, non-employee consultants and non-employee directors. Non-cash stock-based compensation expense by expense category for the years ended December 31, 2019, 2018, and 2017 is as follows:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
<th>December 31, 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of sales</td>
<td>$5,799</td>
<td>$3,531</td>
<td>$1,783</td>
</tr>
<tr>
<td>Research and development</td>
<td>17,196</td>
<td>10,189</td>
<td>6,836</td>
</tr>
<tr>
<td>General and administrative</td>
<td>64,222</td>
<td>34,181</td>
<td>20,221</td>
</tr>
<tr>
<td>Sales and marketing</td>
<td>21,266</td>
<td>12,363</td>
<td>6,672</td>
</tr>
<tr>
<td><strong>Total stock-based compensation</strong></td>
<td>$108,483</td>
<td>$60,264</td>
<td>$35,512</td>
</tr>
</tbody>
</table>

In connection with the April 2018 transition of the Company’s former Chief Operating Officer, the Company accelerated the vesting of 69,950 shares under his previously unvested stock options and 54,350 shares under his previously unvested restricted stock units whereby such unvested stock options and unvested restricted stock units vest on December 31, 2018. It was determined that the continuing service to be provided by the Company’s Chief Operating Officer to the Company through December 31, 2018 was substantive and, as a result, the Company recognized the additional non-cash stock-based compensation expense for the modified awards evenly over the transition term of April 25, 2018 to December 31, 2018. During the year ended December 31, 2018, the Company recorded $3.9 million of non-cash stock-based compensation expense for the modified awards.

In connection with the combination with Genomic Health, the Company accelerated the vesting of 364,281 shares of previously unvested stock options and 70,138 shares of previously unvested restricted stock units for employees with qualifying termination events. The Company recognized the additional non-cash stock-based compensation as of December 31, 2019. During the year ended December 31, 2019, the Company recorded $21.6 million of non-cash stock-based compensation expense for the accelerated awards.
Determining Fair Value

Valuation and Recognition—The fair value of each service-based option award is estimated on the date of grant using the Black-Scholes option-pricing model. The fair value of each market measure-based award is estimated on the date of grant using a Monte Carlo simulation pricing model. The fair value of service-based awards for each restricted stock unit award is determined on the date of grant using the closing stock price on that day. The estimated fair value of these awards is recognized to expense using the straight-line method over the vesting period. For awards that vest when a performance condition is achieved, the Company performs an evaluation of internal and external factors to determine the number of shares that are most likely to vest based on the probability of what performance conditions will be met. The Black-Scholes and Monte Carlo pricing models utilize the following assumptions:

Expected Term—Expected life of an option award is the average length of time over which the Company expects employees will exercise their options, which is based on historical experience with similar grants. Expected life of a market measure-based award is based on the applicable performance period.

Expected Volatility—Expected volatility is based on the Company’s historical stock volatility data over the expected term of the awards.

Risk-Free Interest Rate—The Company bases the risk-free interest rate on the implied yield currently available on U.S. Treasury zero-coupon issues with an equivalent expected term.

Forfeitures—The Company recognizes forfeitures as they occur.

The fair value of each option is based on the assumptions in the following table:

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option Plan Shares</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk-free interest rates</td>
<td>2.54% - 2.59%</td>
<td>2.73% - 2.79%</td>
<td>2.1% - 2.2%</td>
</tr>
<tr>
<td>Expected term (in years)</td>
<td>6.28</td>
<td>5.45 - 6.44</td>
<td>6.51 - 6.59</td>
</tr>
<tr>
<td>Expected volatility</td>
<td>64.95% - 64.99%</td>
<td>61.82% - 66.17%</td>
<td>62.1% - 62.95%</td>
</tr>
<tr>
<td>Dividend yield</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Weighted average fair value per share of options granted during the period</td>
<td>$57.11</td>
<td>$24.55</td>
<td>$25.23</td>
</tr>
<tr>
<td><strong>ESPP Shares</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk-free interest rates</td>
<td>1.6% - 2.4%</td>
<td>2.1% - 2.8%</td>
<td>1% - 1.6%</td>
</tr>
<tr>
<td>Expected term (in years)</td>
<td>0.4 - 2.0</td>
<td>0.5 - 2.0</td>
<td>0.5 - 2.0</td>
</tr>
<tr>
<td>Expected volatility</td>
<td>43.2% - 57.6%</td>
<td>51.7% - 65.4%</td>
<td>45% - 85.5%</td>
</tr>
<tr>
<td>Dividend yield</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Weighted average fair value per share of stock purchase rights granted during the period</td>
<td>$29.21</td>
<td>$20.47</td>
<td>$17.87</td>
</tr>
</tbody>
</table>
Stock Option, Restricted Stock, and Restricted Stock Unit Activity

A summary of stock option activity under the Stock Plans during the years ended December 31, 2019, 2018, and 2017 is as follows:

<table>
<thead>
<tr>
<th>Options</th>
<th>Shares</th>
<th>Weighted Average Exercise Price</th>
<th>Weighted Average Remaining Contractual Term (Years)</th>
<th>Aggregate Intrinsic Value(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outstanding, January 1, 2017</td>
<td>3,505,481</td>
<td>$ű 7.00</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>Granted</td>
<td>953,097</td>
<td>21.97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(1,067,120)</td>
<td>4.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forfeited</td>
<td>(30,997)</td>
<td>13.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding, December 31, 2017</td>
<td>3,360,461</td>
<td>$ű 11.89</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>Granted</td>
<td>343,566</td>
<td>44.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(1,033,012)</td>
<td>6.42</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forfeited</td>
<td>(139,454)</td>
<td>24.07</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding, December 31, 2018</td>
<td>2,531,561</td>
<td>$ű 17.86</td>
<td>6.6</td>
<td></td>
</tr>
<tr>
<td>Granted</td>
<td>186,044</td>
<td>92.61</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assumed through acquisition</td>
<td>650,405</td>
<td>60.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exercised</td>
<td>(641,925)</td>
<td>13.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forfeited</td>
<td>(25,792)</td>
<td>33.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outstanding, December 31, 2019</td>
<td>2,700,293</td>
<td>$ű 34.01</td>
<td>6.7 $ű 158,466</td>
<td></td>
</tr>
<tr>
<td>Exercisable, December 31, 2019</td>
<td>1,411,179</td>
<td>$ű 24.17</td>
<td>5.7 $ű 96,608</td>
<td></td>
</tr>
</tbody>
</table>

(1) The total intrinsic value of options exercised during the years ended December 31, 2019, 2018, and 2017 was $52.0 million, $53.0 million, and $47.0 million, respectively, determined as of the date of exercise.

A summary of restricted stock and restricted stock unit activity under the Stock Plans during the years ended December 31, 2019, 2018, and 2017 is as follows:

<table>
<thead>
<tr>
<th>Restricted Shares</th>
<th>Weighted Average Grant Date Fair Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shares</td>
<td>$</td>
</tr>
<tr>
<td>Outstanding, January 1, 2017</td>
<td>5,601,316</td>
</tr>
<tr>
<td>Granted</td>
<td>2,035,679</td>
</tr>
<tr>
<td>Released</td>
<td>(1,132,265)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(355,952)</td>
</tr>
<tr>
<td>Outstanding, December 31, 2017</td>
<td>6,148,778</td>
</tr>
<tr>
<td>Granted</td>
<td>1,686,385</td>
</tr>
<tr>
<td>Released</td>
<td>(1,277,727)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(311,262)</td>
</tr>
<tr>
<td>Outstanding, December 31, 2018</td>
<td>6,246,174</td>
</tr>
<tr>
<td>Granted</td>
<td>1,800,467</td>
</tr>
<tr>
<td>Assumed through acquisition</td>
<td>528,420</td>
</tr>
<tr>
<td>Released</td>
<td>(3,952,372)</td>
</tr>
<tr>
<td>Forfeited</td>
<td>(238,684)</td>
</tr>
<tr>
<td>Outstanding, December 31, 2019</td>
<td>4,384,005</td>
</tr>
</tbody>
</table>
As of December 31, 2019, there was approximately $214.4 million of total unrecognized compensation cost related to non-vested share-based compensation arrangements granted under all equity compensation plans. The Company expects to recognize that cost over a weighted average period of 2.43 years.

The Company received approximately $8.8 million, $6.6 million, and $5.1 million from stock option exercises during the years ended December 31, 2019, 2018 and 2017, respectively. During the years ended December 31, 2019, 2018, and 2017, 176,458, 346,609, and 423,423 shares of common stock, respectively, were issued under the Company’s 2010 Purchase Plan, resulting in proceeds to the Company of $8.4 million, $4.9 million, and $2.8 million, respectively.

**Shares Reserved for Issuance**

The Company has reserved shares of its authorized common stock for issuance pursuant to its employee stock purchase and equity plans, including all outstanding stock option grants noted above at December 31, 2019, as follows:

<table>
<thead>
<tr>
<th>Shares reserved for issuance</th>
<th>2019 Stock Plan</th>
<th>2010 Purchase Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019 Stock Plan</td>
<td>7,560,301</td>
<td></td>
</tr>
<tr>
<td>2010 Purchase Plan</td>
<td>1,879,636</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9,439,937</td>
<td></td>
</tr>
</tbody>
</table>

**6) COMMITMENTS AND CONTINGENCIES**

The Company acts as lessee under all of its lease agreements, which includes operating leases for corporate offices, laboratory space, warehouse space, vehicles and certain laboratory and office equipment. The Company also has finance leases for certain equipment, which are not material to the Company's consolidated financial statements. The leases have remaining lease terms of 1 year to 9 years, some of which include options to extend the lease for up to 10 years, and some of which include options to terminate the lease within 1 year. The Company includes any renewal or termination option in its lease payment calculations if it is reasonably certain to exercise the option. "Reasonably certain" is assessed internally based on economic, industry, company, strategic and contractual factors. The components of lease expense were as follows:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Year Ended December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating lease cost</td>
<td>$ 9,200</td>
</tr>
<tr>
<td>Short-term lease cost</td>
<td>219</td>
</tr>
<tr>
<td>Variable lease cost</td>
<td>896</td>
</tr>
<tr>
<td>Total Lease Cost</td>
<td>$ 10,315</td>
</tr>
</tbody>
</table>

Certain vehicle leases include variable lease payments that depend on an index or rate. Those lease payments are initially measured using the index or rate at the lease commencement date.

The Company calculates its incremental borrowing rates for specific lease terms, used to discount future lease payments, as a function of the U.S. Treasury rate and an indicative Moody’s rating for operating leases. The Company’s weighted average discount rate and weighted average lease term remaining on lease liabilities is approximately 6.80% and 9.8 years, respectively.
Supplemental disclosure of cash flow information related to the Company's cash and non-cash activities with its operating leases are as follows:

<table>
<thead>
<tr>
<th>Other Information</th>
<th>Year Ended December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash paid for amounts included in the measurement of lease liabilities:</td>
<td>$ 9,641</td>
</tr>
<tr>
<td>Operating cash flows from operating leases</td>
<td>$ 9,641</td>
</tr>
<tr>
<td>Non-cash investing and financing activities:</td>
<td>$ 51,030</td>
</tr>
<tr>
<td>Right-of-use assets obtained in exchange for new operating lease liabilities (1)</td>
<td>$ 51,030</td>
</tr>
</tbody>
</table>

(1) For the year ended December 31, 2019, this includes right-of-use assets obtained from the initial adoption of ASC 842 of approximately $20.6 million.

As of December 31, 2019, the Company’s right-of-use assets are $126.4 million, which are reported in operating lease right-of-use assets in the Company’s consolidated balance sheet. As of December 31, 2019, the Company has outstanding lease obligations of $126.6 million, of which $7.9 million is reported in operating lease liabilities, current portion and $118.7 million is reported in operating lease liabilities, less current portion in the Company’s consolidated balance sheet.

The Company has taken advantage of certain practical expedients offered to registrants at the adoption of ASC 842. The Company does not apply the recognition requirements of ASC 842 to short-term leases. Instead, those lease payments are recognized in profit or loss on a straight-line basis over the lease term. Further, as a practical expedient, all lease contracts are accounted for as one single lease component, as opposed to separating lease and non-lease components to allocate the consideration within a single lease contract.

Maturities of operating lease liabilities on an annual basis as of December 31, 2019 were as follows (amounts in thousands):

<table>
<thead>
<tr>
<th>Maturities of operating lease liabilities (In thousands)</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>15,967</td>
</tr>
<tr>
<td>2021</td>
<td>17,048</td>
</tr>
<tr>
<td>2022</td>
<td>17,068</td>
</tr>
<tr>
<td>2023</td>
<td>18,701</td>
</tr>
<tr>
<td>2024</td>
<td>18,913</td>
</tr>
<tr>
<td>Thereafter</td>
<td>91,852</td>
</tr>
<tr>
<td>Total minimum lease payments</td>
<td>179,549</td>
</tr>
<tr>
<td>Imputed interest</td>
<td>(52,993)</td>
</tr>
<tr>
<td>Total</td>
<td>$ 126,556</td>
</tr>
</tbody>
</table>

On January 1, 2019, the Company elected the modified retrospective method of transition to adopt the new lease standard ASC 842. At December 31, 2018, prior to adoption of the new lease standard, operating lease obligations were not included as a liability on the balance sheet. Therefore, the operating lease obligations are included in the table for comparative purposes only and the total lease liability is not included as it is not applicable.
The Company’s future minimum lease payments as of December 31, 2018, were as follows:

<table>
<thead>
<tr>
<th>Year Ending December 31,</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>3,861</td>
</tr>
<tr>
<td>2020</td>
<td>5,135</td>
</tr>
<tr>
<td>2021</td>
<td>4,995</td>
</tr>
<tr>
<td>2022</td>
<td>5,027</td>
</tr>
<tr>
<td>2023</td>
<td>5,146</td>
</tr>
<tr>
<td>Thereafter</td>
<td>44,286</td>
</tr>
<tr>
<td>Total lease obligations</td>
<td>68,450</td>
</tr>
</tbody>
</table>

The Company evaluates whether it is the accounting owner of leased assets during the construction period when it is involved in the construction of the leased asset. Due to the funding provided by the Company for costs related to the construction of its new headquarters, as of December 31, 2018, the Company was considered, for accounting purposes only, the owner of the construction project in accordance with build-to-suit accounting under the accounting guidance that was superseded by ASC 842 on January 1, 2019. As of December 31, 2018, the Company had contributed $2.7 million towards the project. All project construction costs paid by the landlord were accounted for as assets under construction. As of December 31, 2018, the landlord funded $3.9 million towards construction costs related to this project, of which $2.1 million was included as a financing obligation and recorded in other long-term liabilities and $1.8 million was included as a financing obligation and recorded in accrued expenses in the Company’s consolidated balance sheets. Upon transition to ASC 842 on January 1, 2019, the Company is no longer considered to be the owner of the construction project under build-to-suit accounting. As such, the amounts funded by the landlord, previously recognized as an asset under construction and corresponding financing obligation, were de-recognized.

The Company executed a lease agreement for a new facility in Redwood City, California in 2019 that will commence in June 2020. Upon commencement, the Company anticipates to recognize $11.3 million for the operating lease right-of-use assets and $11.3 million for the operating lease liabilities in the consolidated balance sheet, respectively.

Rent expense included in the accompanying consolidated statements of operations was approximately $3.6 million and $2.6 million for the years ended December 31, 2018 and 2017, respectively.

License Agreements

The Company licenses certain technologies that are, or may be, incorporated into its technology under several license agreements. Generally, the license agreements require the Company to pay royalties based on net revenues received using the technologies and may require minimum royalty amounts or maintenance fees.

**Mayo.** See Note 2 for information related to the Mayo license agreement.

**Hologic.** In October 2009, the Company entered into a technology license agreement with Hologic, Inc. (“Hologic”). Under the license agreement, Hologic granted the Company an exclusive, worldwide license within the field of human stool based colorectal cancer and pre-cancer detection or identification with regard to certain Hologic patents, patent applications and improvements, including Hologic’s Invader detection chemistry (the “Covered Hologic IP”). The license agreement also provided the Company with non-exclusive, worldwide licenses to the Covered Hologic IP within a field covering clinical diagnostic purposes relating to colorectal cancer (including cancer diagnosis, treatment, monitoring or staging) and the field of detection or identification of colorectal cancer and pre-cancers through means other than human stool samples. In December 2012, the Company entered into an amendment to this license agreement with Hologic pursuant to which Hologic granted the Company a non-exclusive worldwide license to the Covered Hologic IP within the field of any disease or condition within, related to or affecting the gastrointestinal tract and/or appended mucosal surfaces. The Company is required to pay Hologic a low single-digit royalty on the Company’s net sales of products using the Covered Hologic IP.
**Epic Sciences.** In June 2016, Genomic Health (now a wholly-owned subsidiary of the Company) entered into a collaboration agreement with Epic Sciences, which was superseded and replaced in March 2019 by a license agreement and laboratory services agreement with Epic Sciences, under which Genomic Health was granted exclusive distribution rights to commercialize Epic Sciences’ AR-V7 Nucleus Detect test in the United States, which is marketed as Oncotype DX AR-V7 Nucleus Detect. The Company has primary responsibility, in accordance with applicable laws and regulations, for marketing and promoting the test, order fulfillment, billing and collections of receivables, claims appeals, customer support, and providing and maintaining order management systems for the test. Epic Sciences is responsible for performing all tests, performing studies including analytic and clinical validation studies, and seeking Medicare coverage and a Medicare payment rate from the CMS for the test. The license and laboratory service agreement has a term of 10 years from June 2016, unless terminated earlier under certain circumstances. The Oncotype DX AR-V7 Nucleus Detect test became commercially available in February 2018. The Company recognizes revenues for the test performed under this arrangement and Epic Sciences receives a fee per test performed that represents the fair market value for the testing services they perform.

As of December 31, 2019, the Company owns 18,258,838 shares of preferred stock of Epic Sciences recorded at a fair value of $10.8 million which is included in other-long term assets on the Company’s consolidated balance sheet. The Company has concluded it is not the primary beneficiary and thus has not consolidated the investee pursuant to the requirements of ASC 810, Consolidation. The Company will continue to assess its investment and future commitments to the investee and to the extent its relationship with the investee changes, may be required to consolidate the investee in future periods. The Company determined that the investment is an equity investment for which the Company does not have the ability to exercise significant influence. The Company adjusts the carrying value of its non-marketable equity securities for changes from observable transactions for identical or similar investments of the same issuer, less impairment. All gains and losses on non-marketable equity securities, realized and unrealized, are recognized in other income (expense), net.

**Biocartis N.V.** In September 2017, Genomic Health entered into an exclusive license and development agreement with Biocartis, a molecular diagnostics company based in Belgium, to develop and commercialize an in vitro diagnostic (“IVD”) version of the Oncotype DX Breast Recurrence Score test on the Biocartis Idylla platform. Under the terms of the license and development agreement, the Company has an exclusive, worldwide, royalty-bearing license to develop and commercialize an IVD version of the Oncotype DX Breast Recurrence Score test on the Biocartis Idylla platform, and an option to expand the collaboration to include additional tests in oncology and urology. The Company has primary responsibility for developing, validating and obtaining regulatory authorizations and registrations for IVD Oncotype DX tests to be performed on the Idylla platform. The Company is also responsible for manufacturing and commercialization activities with respect to such tests.

Pursuant to the license and development agreement, Genomic Health recorded a one-time upfront license and option fee of €2.8 million, or $3.2 million. In December 2017, Genomic Health purchased 270,000 ordinary shares of Biocartis at the market price of €12.50 for a total cost of €3.4 million or $4.0 million. This investment was subject to a lock-up agreement that expired in December 2018. The investment has been recognized at fair value, which the Company estimated to be $1.7 million as of December 31, 2019 and is included in marketable securities on the Company's consolidated balance sheet.

Under a November 2018 addendum to the license and development agreement, the Company exercised its option to expand the collaboration to include tests in urology and obtained a right of first refusal to add a test for the non-invasive detection of prostate cancer in a pre-biopsy setting.

Additional terms of the license and development agreement and the addendum include the Company’s obligation to pay Biocartis an aggregate of €2.5 million in cash upon achievement of certain milestones and €2.0 million for the expansion of the collaboration to include additional tests in oncology. In addition, the Company will pay royalties based primarily on the future sales volumes of the Company’s tests performed on the Idylla platform.

**Legal Matters**

The United States Department of Justice (“DOJ”) is investigating Genomic Health's compliance with the Medicare Date of Service billing regulation. In March 2017, Genomic Health received a civil investigative demand (“CID”) from the U.S. Attorney's Office for the Eastern District of New York in connection with this matter and has produced specific documents in response to the CID. In July 2019 and January 2020, Genomic Health received additional subpoenas from the DOJ related to this inquiry and the Company is cooperating with those requests. An adverse outcome could include the Company being required to pay treble damages, incur civil and criminal penalties, paying attorneys' fees, entering into a corporate integrity agreement, being excluded from participation in government healthcare programs, including Medicare and Medicaid, and other adverse actions that could materially and adversely affect the Company's business, financial condition and results of operation.
The DOJ’s investigation is still in process and the scope and outcome of the investigation is not determinable at this time. See Note 13 for additional information on the Company’s fair value determination of this pre-acquisition loss contingency. There can be no assurance that any settlement, resolution, or other outcome of this matter during any subsequent reporting period will not have a material adverse effect on the Company’s results of operations or cash flows for that period or on the Company’s financial position.

(7) ACCRUE LIABILITIES

Accrued liabilities at December 31, 2019 and 2018 consisted of the following:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Compensation</td>
<td>$ 95,166</td>
</tr>
<tr>
<td>Pfizer Promotion Agreement related costs</td>
<td>33,230</td>
</tr>
<tr>
<td>Professional fees</td>
<td>29,108</td>
</tr>
<tr>
<td>Other</td>
<td>13,976</td>
</tr>
<tr>
<td>Assets under construction</td>
<td>10,720</td>
</tr>
<tr>
<td>Research and trial related expenses</td>
<td>8,368</td>
</tr>
<tr>
<td>Licenses</td>
<td>2,761</td>
</tr>
<tr>
<td></td>
<td><strong>$ 193,329</strong></td>
</tr>
</tbody>
</table>

(8) LONG-TERM DEBT

Building Purchase Mortgage

During June 2015, the Company entered into a $5.1 million credit agreement with a third-party financial institution to finance the purchase of a research and development facility located in Madison, Wisconsin. The credit agreement was collateralized by the acquired building.

In September 2018, the Company entered into a Purchase and Sale Agreement with a third-party to sell its research and development facility. The Company also simultaneously entered into a Master Lease Agreement with the third-party to lease the facility back. The sale-leaseback arrangement is recorded under the financing method of accounting, as the Company has continuing involvement in planned expansions of the facility and construction of the adjacent corporate headquarters facility. Under the financing method, the Company does not recognize the proceeds received from the third-party as a sale of the facility. The facility remains in property, plant and equipment on the Company’s consolidated balance sheet, and the consideration of $6.8 million received in the sale is recorded as a financing obligation in other long-term liabilities on the Company’s consolidated balance sheet as of December 31, 2019. A portion of the proceeds received from the sale were used to repay the outstanding balance on the mortgage on the facility of $4.5 million, which occurred in 2018, and as of December 31, 2019, the mortgage had been fully repaid in connection with the termination of the credit agreement. The remaining proceeds were utilized to fund the initial construction of the Company’s corporate headquarters discussed in more detail in Note 6.

Construction Loan Agreement

During December 2017, the Company entered into a loan agreement with Fifth Third Bank (formerly MB Financial Bank, N.A.) (the “Construction Loan Agreement”), which provides the Company with a non-revolving construction loan (the “Construction Loan”) of $25.6 million. The Company is using the Construction Loan proceeds to finance the construction of an additional clinical laboratory and related facilities in Madison, Wisconsin. The Construction Loan is collateralized by the additional clinical laboratory and related facilities.

Pursuant to the Construction Loan Agreement, funds drawn will bear interest at a rate equal to the sum of the 1-month LIBOR rate plus 2.25 percent. Regular monthly payments are interest-only for the first 24 months, with further payments based on a 20 year amortization schedule. Amounts borrowed pursuant to the Construction Loan Agreement may be prepaid at any time without penalty. The maturity date of the Construction Loan Agreement is December 10, 2022.
In November 2017, Fifth Third Bank, on behalf of the Company, issued an Irrevocable Standby Letter of Credit in the amount of $0.6 million in favor of the City of Madison, Wisconsin (the “City Letter of Credit”). The City Letter of Credit is deemed to have been issued pursuant to the Construction Loan Agreement. The amount of the City Letter of Credit will reduce, dollar for dollar, the amount available for borrowing under the Construction Loan Agreement.

As a condition to Fifth Third’s initial advance of loan proceeds under the Construction Loan Agreement, the Company was required to first invest at least $16.4 million of its own cash into the construction project. The Company fulfilled its required initial investment and made its first draw on the Construction Loan in June 2018. In accordance with the Construction Loan Agreement, the Company began making monthly interest-only payments of $0.6 million through November 2019. Starting in December 2019, the Company began making monthly payments towards the outstanding principal balance plus accrued interest. As of December 31, 2019, the Company has drawn $25.0 million from the Construction Loan, including $0.7 million of interest incurred, which is accrued for as an interest reserve and represents a portion of the $25.0 million loan balance as of December 31, 2019. The Company capitalized the $0.7 million of interest to the construction project. As of December 31, 2018, the Company had drawn $24.7 million from the Construction Loan. The Company incurred approximately $0.2 million of debt issuance costs related to the Construction Loan, which are recorded as a direct deduction from the liability. The debt issuance costs are being amortized over the life of the Construction Loan.

The Company agreed in the Construction Loan Agreement to various financial covenants including minimum liquidity and minimum tangible net worth. As of December 31, 2019, the Company is in compliance with all of those covenants.

The table below represents the future principal obligations as of December 31, 2019. Amounts included in the table are in thousands:

<table>
<thead>
<tr>
<th>Year ending December 31</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$</td>
</tr>
<tr>
<td>2020</td>
<td>834</td>
</tr>
<tr>
<td>2021</td>
<td>787</td>
</tr>
<tr>
<td>2022</td>
<td>23,379</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>25,000</strong></td>
</tr>
</tbody>
</table>

### Tax Increment Financing Loan Agreements

The Company entered into two separate Tax Increment Financing Loan Agreements (“TIFs”) in February 2019 and June 2019 with the City of Madison, Wisconsin. The TIFs provide for $4.6 million of financing in the aggregate. In consideration for the loans, the Company is obligated to create and maintain 500 full-time jobs over a five-year period, starting on the date of occupancy of the buildings constructed. In the event that the job creation goals are not met, the Company would be required to pay a penalty.

The Company records the earned financial benefits as the full-time equivalent positions are filled. The amount earned is recorded as a liability and amortized as a reduction of operating expenses over a two-year period, which is the timeframe when the TIFs will be repaid through property taxes.

As of December 31, 2019, the Company has earned and received payment of $4.6 million from the City of Madison. As of December 31, 2019, the Company has recorded a $2.7 million liability in other current liabilities on the Company’s consolidated balance sheet, reflecting when the expected benefit of the financial benefits amortization will reduce future operating expenses.
Convertible note obligations included in the consolidated balance sheets consisted of the following:

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td><strong>Fair Value of Liability Component at Issuance (1)</strong></td>
<td></td>
</tr>
<tr>
<td><strong>2027 Convertible notes</strong></td>
<td>$472,501</td>
</tr>
<tr>
<td><strong>2025 Convertible notes</strong></td>
<td>$299,187</td>
</tr>
<tr>
<td><strong>Total Convertible notes</strong></td>
<td>$1,162,549</td>
</tr>
<tr>
<td><strong>Less: Debt discount (2)</strong></td>
<td>(342,463)</td>
</tr>
<tr>
<td><strong>Less: Debt issuance costs (3)</strong></td>
<td>(16,481)</td>
</tr>
<tr>
<td><strong>Net convertible debt including current maturities</strong></td>
<td>$803,605</td>
</tr>
</tbody>
</table>

(1) As each of the convertible instruments may be settled in cash upon conversion, for accounting purposes, they were separated into a liability component and an equity component. The amount allocated to the equity component is the difference between the principal value of the instrument and the fair value of the liability component at issuance. The resulting debt discount is being amortized to interest expense at the respective effective interest rate over the contractual term of the debt. In March 2019, a portion of the 2025 Convertible Notes were extinguished. The fair value of the liability component at issuance reflected above represents the liability value at issuance for the applicable portion of the 2025 Notes which remain outstanding at December 31, 2019. The fair value of the liability component of the 2025 Notes at December 31, 2018 was $654.8 million with the equity component being $267.9 million including a $14.2 million premium.

(2) The unamortized discount consists of the following:

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td><strong>2027 Convertible notes</strong></td>
<td>$253,340</td>
</tr>
<tr>
<td><strong>2025 Convertible notes</strong></td>
<td>$89,123</td>
</tr>
<tr>
<td><strong>Total unamortized discount</strong></td>
<td>$342,463</td>
</tr>
</tbody>
</table>

(3) Debt issuance costs consist of the following:

<table>
<thead>
<tr>
<th></th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td><strong>2027 Convertible notes</strong></td>
<td>$10,251</td>
</tr>
<tr>
<td><strong>2025 Convertible notes</strong></td>
<td>$6,230</td>
</tr>
<tr>
<td><strong>Total debt issuance costs</strong></td>
<td>$16,481</td>
</tr>
</tbody>
</table>

Issuances and Settlements

In January 2018, the Company issued and sold $690.0 million in aggregate principal amount of 1.0% Convertible Notes (the “January 2018 Notes”) with a maturity date of January 15, 2025 (the “Maturity Date”). The January 2018 Notes accrue interest at a fixed rate of 1.0% per year, payable semi-annually in arrears on January 15 and July 15 of each year, beginning on July 15, 2018. The net proceeds from the issuance of the January 2018 Notes were approximately $671.1 million, after deducting underwriting discounts and commissions and the offering expenses payable by the Company.
In June 2018, the Company issued and sold an additional $218.5 million in aggregate principal amount of 1.0% Convertible Notes (the “June 2018 Notes”). The June 2018 Notes were issued under the same indenture pursuant to which the Company previously issued the January 2018 Notes (the “Indenture”). The January 2018 Notes and the June 2018 Notes (collectively, the “2025 Notes”) have identical terms and are treated as a single series of securities. The net proceeds from the issuance of the June 2018 Notes were approximately $225.3 million, after deducting underwriting discounts and commissions and the offering expenses payable by the Company.

In March 2019, the Company issued and sold $747.5 million in aggregate principal amount of 0.375% Convertible Notes (the “2027 Notes” and, collectively with the 2025 Notes, the “Notes”) with a maturity date of March 15, 2027 (the “Maturity Date”). The 2027 Notes accrue interest at a fixed rate of 0.375% per year, payable semi-annually in arrears on March 15 and September 15 of each year, beginning on September 15, 2019. The net proceeds from the issuance of the 2027 Notes were approximately $729.5 million, after deducting underwriting discounts and commissions and the offering expenses payable by the Company.

The Company utilized a portion of the proceeds from the issuance of the 2027 Notes to settle a portion of the 2025 Notes in privately negotiated transactions. In March 2019, the Company used cash of $494.0 million and an aggregate of 2.2 million shares of the Company’s common stock valued at $182.4 million for total consideration of $676.5 million to settle $493.4 million of the 2025 Notes, of which $375.1 million was allocated to the liability component, $300.8 million was allocated to the equity component, and $0.6 million was used to pay off interest accrued on the 2025 Notes. The consideration transferred was allocated to the liability and equity components of the 2025 Notes using the equivalent rate that reflected the borrowing rate for a similar non-convertible debt instrument immediately prior to settlement. The transaction resulted in a loss on settlement of convertible notes of $10.6 million, which is recorded in interest expense in the Company’s consolidated statement of operations. The loss represents the difference between (i) the fair value of the liability component and (ii) the sum of the carrying value of the debt component and any unamortized debt issuance costs at the time of repurchase.

Summary of Conversion Features

Until the six-months immediately preceding the maturity date of the applicable series of Notes, each series of Notes is convertible only upon the occurrence of certain events and during certain periods, as set forth in the Indenture. The Notes will be convertible into cash, shares of the Company’s common stock (plus, if applicable, cash in lieu of any fractional share), or a combination of cash and shares of the Company’s common stock, at the Company’s election. On or after the date that is six-months immediately preceding the maturity date of the applicable series of Notes until the close of business on the second scheduled trading day immediately preceding the maturity date, holders may convert such Notes at any time.

It is the Company’s intent and policy to settle all conversions through combination settlement. The initial conversion rate is 13.2569 and 8.9554 shares of common stock per $1,000 principal amount for the 2025 Notes and 2027 Notes, respectively, which is equivalent to an initial conversion price of approximately $75.43 and $111.66 per share of the Company’s common stock for the 2025 Notes and 2027 Notes, respectively. The conversion rate is subject to adjustment upon the occurrence of certain specified events but will not be adjusted for accrued and unpaid interest. In addition, holders of the Notes who convert their Notes in connection with a “make-whole fundamental change” (as defined in the Indenture), will, under certain circumstances, be entitled to an increase in the conversion rate.

If the Company undergoes a “fundamental change” (as defined in the Indenture), holders of the Notes may require the Company to repurchase for cash all or part of their Notes at a repurchase price equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid interest.

As of December 31, 2019, the 2027 and 2025 Notes were not convertible. The holders of the 2025 Notes had the right to convert their debentures between July 1, 2019 and December 31, 2019, and 55 notes were converted during the period, which were settled through the issuance of common shares equivalent to the conversion rate with any fractional shares settled in cash. The 2025 Notes no longer met any of the conversion features as of December 31, 2019.

Based on the closing price of our common stock of $92.48 on December 31, 2019, the if-converted values on our 2025 Notes exceed the principal amount by $93.8 million and the 2027 Notes do not exceed the principal amount.
Ranking of Convertible Notes

The Notes are the Company’s senior unsecured obligations and (i) rank senior in right of payment to all of its future indebtedness that is expressly subordinated in right of payment to the Notes; equal in right of payment to all of the Company’s future liabilities that are not so subordinated, unsecured indebtedness; (ii) are effectively junior to all of our existing and future secured indebtedness and other secured obligations, to the extent of the value of the assets securing that indebtedness and other secured obligations; and (iii) are structurally subordinated to all indebtedness and other liabilities of the Company’s subsidiaries.

While the Notes are currently classified on the Company’s consolidated balance sheets at December 31, 2019 as long-term, the future convertibility and resulting balance sheet classification of this liability will be monitored at each quarterly reporting date and will be analyzed dependent upon market prices of the Company’s common stock during the prescribed measurement periods. In the event that the holders of the Notes have the election to convert the Notes at any time during the prescribed measurement period, the Notes would then be considered a current obligation and classified as such.

The Company allocated the total transaction costs of approximately $18.8 million related to the issuance of the January 2018 Notes to the liability and equity components of the January 2018 Notes based on their relative values, with $13.1 million being allocated to the liability component of the January 2018 Notes. Transaction costs attributable to the liability component are amortized to interest expense over the seven years term of the January 2018 Notes, and transaction costs attributable to the equity component are netted with the equity component in stockholders’ equity.

The Company allocated the total transaction costs of approximately $7.4 million related to the issuance of the June 2018 Notes to the liability and equity components of the June 2018 Notes based on their relative values, with $5.1 million being allocated to the liability component of the June 2018 Notes. Transaction costs attributable to the liability component are amortized to interest expense over the remaining six-and-a-half-year term of the June 2018 Notes, and transaction costs attributable to the equity component are netted with the equity component in stockholders’ equity.

The Company allocated the total transaction costs of approximately $18.0 million related to the issuance of the 2027 Notes to the liability and equity components of the 2027 Notes based on their relative values, with $11.4 million being allocated to the liability component of the 2027 Notes. Transaction costs attributable to the liability component are amortized to interest expense over the eight-year term of the 2027 Notes, and transaction costs attributable to the equity component are netted with the equity component in stockholders’ equity.

The Notes do not contain any financial or operating covenants or any restrictions on the payment of dividends, the issuance of other indebtedness or the issuance or repurchase of securities by the Company.

Interest expense for all indebtedness includes the following:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Debt issuance costs amortization</td>
<td>$2,661</td>
</tr>
<tr>
<td>Debt discount amortization</td>
<td>39,595</td>
</tr>
<tr>
<td>Loss on settlement of convertible notes</td>
<td>10,558</td>
</tr>
<tr>
<td>Coupon interest expense</td>
<td>7,325</td>
</tr>
<tr>
<td>Total interest expense on convertible notes</td>
<td>60,139</td>
</tr>
<tr>
<td>Other interest expense</td>
<td>1,460</td>
</tr>
<tr>
<td>Total interest expense</td>
<td>$61,599</td>
</tr>
</tbody>
</table>

The remaining period over which the unamortized debt discount will be recognized as non-cash interest expense is 5.05 years and 7.21 years for the 2025 Notes and 2027 Notes, respectively.
(10) EMPLOYEE BENEFIT PLAN

The Company currently maintains two qualified 401(k) retirement savings plans, one plan for legacy Exact Sciences employees (the “401(k) Plan”), and one for legacy Genomic Health employees (the “Genomic Health Plan”) covering all employees. Under the terms of the 401(k) Plan and the Genomic Health Plan, participants may elect to defer a portion of their compensation into the 401(k) Plan, subject to certain limitations. Company matching contributions may be made at the discretion of the Board of Directors. The Genomic Health Plan is expected to be combined with the 401(k) Plan during the first quarter of 2020.

The Company’s Board of Directors approved 401(k) Plan matching contributions for the years ended December 31, 2019, 2018 and 2017 in the form of Company common stock equal to 100 percent up to 6 percent of the participant’s eligible compensation for that year. The Company recorded compensation expense of approximately $11.8 million, $7.4 million, and $4.3 million, respectively, in the statements of operations for the years ended December 31, 2019, 2018 and 2017.

The Genomic Health Plan match was for employee contributions dollar for dollar up to $4,000 in cash for the year ended December 31, 2019. For the period from the combination date to December 31, 2019, the Company recorded compensation expense of approximately $0.7 million in the statement of operations.

(11) NEW MARKET TAX CREDIT

During the fourth quarter of 2014, the Company received approximately $2.4 million in net proceeds from financing agreements related to working capital and capital improvements at one of its Madison, Wisconsin facilities. This financing arrangement was structured with an unrelated third-party financial institution (the “Investor”), an investment fund, and its majority owned community development entity in connection with the Company’s participation in transactions qualified under the federal New Markets Tax Credit (“NMTC”) program, pursuant to Section 45D of the Internal Revenue Code of 1986, as amended. The Company is required to be in compliance through December 2021 with various regulations and contractual provisions that apply to the NMTC arrangement. Noncompliance with applicable requirements could result in the Investor’s projected tax benefits not being realized and, therefore, require the Company to indemnify the Investor for any loss or recapture of NMTC related to the financing until such time as the recapture provisions have expired under the applicable statute of limitations. The Company does not anticipate any credit recapture will be required in connection with this financing arrangement.

The Investor and its majority owned community development entity are considered Variable Interest Entities (“VIEs”) and the Company is the primary beneficiary of the VIEs. This conclusion was reached based on the following:

- the ongoing activities of the VIEs—collecting and remitting interest and fees and NMTC compliance—were all considered in the initial design and are not expected to significantly affect performance throughout the life of the VIE;
- contractual arrangements obligate the Company to comply with NMTC rules and regulations and provide various other guarantees to the Investor and community development entity;
- the Investor lacks a material interest in the underling economics of the project; and
- the Company is obligated to absorb losses of the VIEs.

Because the Company is the primary beneficiary of the VIEs, they have been included in the consolidated financial statements. There are no other assets, liabilities or transactions in these VIEs outside of the financing transactions executed as part of the NMTC arrangement.

(12) WISCONSIN ECONOMIC DEVELOPMENT TAX CREDITS

During the first quarter of 2015, the Company entered into an agreement with the Wisconsin Economic Development Corporation (“WEDC”) to earn $9.0 million in refundable tax credits if the Company expends $26.3 million in capital investments and establishes and maintains 758 full-time positions over a seven-year period. The tax credits earned are first applied against the tax liability otherwise due, and if there is no such liability present, the claim for tax credits will be reimbursed in cash to the Company. The maximum amount of the refundable tax credit to be earned for each year is fixed, and the Company earns the credits by meeting certain capital investment and job creation thresholds over the seven-year period. Should the Company earn and receive the job creation tax credits but not maintain those full-time positions through the end of the agreement, the Company may be required to pay those credits back to the WEDC.
The Company records the earned tax credits as job creation and capital investments occur. The amount of tax credits earned is recorded as a liability and amortized as a reduction of operating expenses over the expected period of benefit. The tax credits earned from capital investment are recognized as an offset to depreciation expense over the expected life of the acquired capital assets. The tax credits earned related to job creation are recognized as an offset to operational expenses over the life of the agreement, as the Company is required to maintain the minimum level of full-time positions through the seven-year period.

As of December 31, 2019, the Company has earned $9.0 million of tax credits and has received payment of $5.9 million from the WEDC. The unpaid portion is $3.1 million, of which $1.6 million is reported in prepaid expenses and other current assets and $1.5 million is reported in other long-term assets, reflecting when collection of the refundable tax credits is expected to occur. As of December 31, 2019, the Company also has recorded a $2.2 million liability in other current liabilities, reflecting when the expected benefit of the tax credit amortization will reduce future operating expenses.

During the year ended December 31, 2019, the Company amortized $2.4 million of the tax credits earned as a reduction of operating expenses.
(13) BUSINESS COMBINATIONS

Genomic Health, Inc.

On November 8, 2019, the Company acquired all of the outstanding capital stock of Genomic Health. Genomic Health, headquartered in Redwood City, California, provides genomic-based diagnostic tests that address both the overtreatment and optimal treatment of early and late stage cancer. The Company has included the financial results of Genomic Health in the consolidated financial statements from the date of the combination.

The Company entered into this combination to create a leading global cancer diagnostics company and provide a robust platform for continued growth. This combination provides the Company with a commercial presence in more than 90 countries in which the combined company expects to continue to increase adoption of current tests, and to bring new innovative cancer tests to patients around the world.

During 2019, the Company incurred $22.5 million of acquisition-related costs recorded in general and administrative expense. These costs include fees associated with financial, legal, accounting and other advisors incurred to complete the combination.

The combination date fair value of the consideration transferred for Genomic Health was approximately $2.5 billion, which consisted of the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>Value (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash</td>
<td>$1,062</td>
</tr>
<tr>
<td>Common stock issued</td>
<td>1,389</td>
</tr>
<tr>
<td>Fair value of replacement stock options and restricted stock awards</td>
<td>18</td>
</tr>
<tr>
<td>Total purchase price</td>
<td>$2,469</td>
</tr>
</tbody>
</table>

The fair value of the common stock issued as part of consideration was determined on the basis of the closing market price of the Company's shares at the acquisition date. The fair value of the stock options assumed by the Company was determined using the Black-Scholes option pricing model. The share conversion ratio of 0.76534 was applied to convert Genomic Health’s outstanding equity awards for Genomic Health’s common stock into equity awards for shares of the Company’s common stock.
The fair value of options assumed were based on the assumptions in the following table:

<table>
<thead>
<tr>
<th>Option Plan Shares Assumed</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk-free interest rates</td>
<td>0.88% - 2.90%</td>
</tr>
<tr>
<td>Expected term (in years)</td>
<td>3.28 - 6.73</td>
</tr>
<tr>
<td>Expected volatility</td>
<td>63.54% - 69.09%</td>
</tr>
<tr>
<td>Dividend yield</td>
<td>0%</td>
</tr>
<tr>
<td>Weighted average fair value per share of options assumed</td>
<td>$45.75 - $57.44</td>
</tr>
</tbody>
</table>

The purchase price was allocated to the underlying assets acquired and liabilities assumed based upon their estimated fair values at the date of combination as follows:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash and cash equivalents</td>
<td>$87,627</td>
</tr>
<tr>
<td>Marketable securities</td>
<td>201,519</td>
</tr>
<tr>
<td>Accounts receivable</td>
<td>57,400</td>
</tr>
<tr>
<td>Inventory</td>
<td>3,535</td>
</tr>
<tr>
<td>Prepaid expenses and other current assets</td>
<td>8,360</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>69,905</td>
</tr>
<tr>
<td>Goodwill</td>
<td>1,185,918</td>
</tr>
<tr>
<td>Trade name</td>
<td>100,000</td>
</tr>
<tr>
<td>Supply agreement intangible</td>
<td>30,000</td>
</tr>
<tr>
<td>Developed technology</td>
<td>800,000</td>
</tr>
<tr>
<td>In-process research and development (IPR&amp;D)</td>
<td>200,000</td>
</tr>
<tr>
<td>Operating lease right-of-use assets</td>
<td>80,790</td>
</tr>
<tr>
<td>Other long-term assets</td>
<td>14,972</td>
</tr>
<tr>
<td>Accounts payable, accrued liabilities and other current liabilities</td>
<td>(88,995)</td>
</tr>
<tr>
<td>Deferred tax liability</td>
<td>(205,536)</td>
</tr>
<tr>
<td>Operating lease liabilities, current portion</td>
<td>(3,258)</td>
</tr>
<tr>
<td>Operating lease liabilities, less current portion</td>
<td>(71,270)</td>
</tr>
<tr>
<td>Other long-term liabilities</td>
<td>(2,399)</td>
</tr>
<tr>
<td><strong>Total fair value consideration</strong></td>
<td>$2,468,568</td>
</tr>
</tbody>
</table>

The fair value of identifiable intangible assets has been determined using the income approach, which involves significant unobservable inputs (Level 3 inputs). These inputs include projected sales, margin, required rate of return and tax rate, as well as an estimated royalty rate in the cases of the developed technology and trade name intangibles. The developed technology and tradename intangibles are valued using a relief-from-royalty method.

Trade names represent the value associated with the Oncotype DX trade name in the market. The trade name intangible is amortized on a straight-line basis over its estimated useful life of 16 years.

Developed technology represents purchased technology that had reached technological feasibility and for which Genomic Health had substantially completed development as of the date of combination. Fair value was determined using future discounted cash flows related to the projected income stream of the developed technology for a discrete projection period. Cash flows were discounted to their present value as of the closing date. Developed technology is amortized on a straight-line basis over its estimated useful life of 10 years.

IPR&D represent capitalized incomplete research projects as of the combination date and had no alternative future use. The amounts capitalized are being accounted for as indefinite-lived intangible assets, subject to impairment testing, until completion or abandonment of the R&D efforts associated with the projects. The primary basis for determining technological
feasibility of these projects is obtaining regulatory approval to market the underlying product and expected commercial release. The Company recorded $200.0 million of IPR&D related to the development of an IVD version of the Oncotype DX Breast Recurrence Score test. The IPR&D asset was valued using the multiple-period excess earnings method approach.

The calculation of the excess of the purchase price over the estimated fair value of the tangible net assets and intangible assets acquired was recorded to goodwill, which is primarily attributed to the assembled workforce and expanded market opportunities including a broader global presence. The total goodwill related to this combination is not deductible for tax purposes.

The Company assumed unvested stock options and restricted stock awards with combination-date fair values of $34.3 million and $42.3 million, respectively. Of the total consideration for stock options and restricted stock awards, $2.2 million and $15.6 million, respectively, was allocated to the purchase consideration and $32.1 million and $26.7 million, respectively, was allocated to future services and will be expensed over a weighted average period of 1.69 years and 2.12 years, respectively.

The amounts of revenue and net loss before tax of Genomic Health included in the Company’s consolidated statement of operations from the combination date of November 8, 2019 to December 31, 2019 are as follows:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>$</th>
<th>66,174</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Net loss before tax</td>
<td>(40,446)</td>
<td></td>
</tr>
</tbody>
</table>

The following unaudited pro forma financial information summarized the combined results of operations for the Company and Genomic Health, as though the companies were combined as of the beginning of January 1, 2018.

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31, 2019</th>
<th>December 31, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total revenues</td>
<td>$1,266,591</td>
<td>$848,573</td>
</tr>
<tr>
<td>Net loss before tax</td>
<td>(252,203)</td>
<td>(302,173)</td>
</tr>
</tbody>
</table>

The unaudited pro forma financial information for all periods presented above has been calculated after adjusting the results of Genomic Health to reflect the business combination accounting effects resulting from this combination, including the amortization expense from acquired intangible assets and the stock-based compensation expense for unvested stock options and restricted stock awards assumed as though the combination occurred as of January 1, 2018. The historical consolidated financial statements have been adjusted in the unaudited pro forma combined financial information to give effect to pro forma events that are directly attributable to the business combination and factually supportable. The unaudited pro forma financial information is for informational purposes only and is not indicative of the results of operations that would have been achieved if the combination had taken place as of January 1, 2018.

Given the timing of the close of the combination and the time necessary to complete the allocation of the purchase price to the identified assets, the initial accounting for the business combination was not complete at the time the financial statements were issued. The total purchase price allocation reflected in the accompanying financial statements is provisional and is based upon estimates and assumptions that are subject to change within the measurement period. The measurement period remains open pending the completion of valuation procedures related to the certain acquired assets and liabilities assumed, primarily in connection with acquired leases, as well as finalization of the pre-combination income tax returns. As described in Note 6, the Company identified a pre-acquisition contingency relating to the DOJ investigation. The Company has assigned a provisional fair value estimate of zero to this pre-acquisition contingency. The Company will reevaluate this matter based upon facts and circumstances that existed as of the acquisition date and any adjustments to the preliminary fair value estimate will be recorded to goodwill if identified within the measurement period. Subsequent to the measurement period or the Company’s final determination of the pre-acquisition contingency’s estimated value, whichever comes first, changes to this estimate could have a material impact on our results of operations and financial position.

In connection with the combination, the Company decided to terminate certain Genomic Health executives in the fourth quarter of 2019 and recorded $32.1 million in severance benefits charges.

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In November 2017, the Company made a $3.0 million cash investment (the “2017 Biomatrica Investment”) in Biomatrica, Inc. (“Biomatrica”), then a privately held company specializing in the collection and preservation of biological materials. The Company made the 2017 Biomatrica Investment in connection with entering into an agreement for Biomatrica to supply certain products to the Company. Through the 2017 Biomatrica Investment, the Company acquired shares of Biomatrica’s Series E Preferred Stock representing 10 percent of Biomatrica’s then-outstanding shares of capital stock on an as-converted basis. In June 2018, the Company loaned Biomatrica $1.0 million pursuant to a Senior Secured Promissory Note and Security Agreement (the "Promissory Note").

In October 2018, the Company completed a full acquisition of Biomatrica. In the acquisition, the Company acquired all of the outstanding equity interests for an aggregate purchase price of $20.0 million net of cash received, debt repaid and certain other adjustments. Contingent consideration for an additional $20.0 million could be earned based upon certain revenue milestones being met. The purpose of the acquisition was to secure a key supplier for the Company’s pipeline products and expand the Company’s commercial offerings. The acquisition-related costs incurred were not material to the consolidated financial statements.

The total purchase consideration for the 2018 Biomatrica Acquisition was $24.5 million consisting of a cash payment at closing of $17.9 million including $0.1 million for a post-closing working capital adjustment, contingent consideration payable in cash and having a fair value of $3.4 million, exchange of Series E Preferred stock with an acquisition date fair value of $2.2 million and the reduction of the $1.0 million Promissory Note previously provided to Biomatrica and considered part of the consideration transferred. The Company’s previously held Series E Preferred stock ownership and the contingent consideration fair value were determined through a valuation using the income approach and involved significant unobservable inputs including revenue and operating margin forecasts, an applicable tax rate, a terminal growth rate and discount rate (Level 3). The valuation of the previously held investment indicated a loss on the investment of $0.8 million. The contingent consideration has been recognized in other long-term liabilities in the consolidated financial statements.

The total purchase consideration was allocated to the underlying assets acquired and liabilities assumed based upon their estimated fair values at the date of acquisition as follows:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net operating assets</td>
<td>2,168</td>
</tr>
<tr>
<td>Goodwill</td>
<td>15,300</td>
</tr>
<tr>
<td>Trade name</td>
<td>700</td>
</tr>
<tr>
<td>Customer relationships and contracts</td>
<td>2,700</td>
</tr>
<tr>
<td>Developed technology</td>
<td>5,400</td>
</tr>
<tr>
<td>Net operating liabilities</td>
<td>(1,754)</td>
</tr>
<tr>
<td>Total purchase price</td>
<td>24,514</td>
</tr>
</tbody>
</table>

The fair value of identifiable intangible assets has been determined using the income approach, which involves significant unobservable inputs (Level 3 inputs). These inputs include projected sales, margin, required rate of return and tax rate, as well as an estimated royalty rate in the cases of the developed technology and trade name intangibles. The developed technology and tradename intangibles are valued using a relief-from-royalty method. The customer relationships are valued using the multi-period excess earnings method.

Trade names represent the value identified associated with the Biomatrica trade name in the market. The trade name intangible is amortized on a straight-line basis over its estimated useful life of 15 years.

Developed technology represents purchased technology that had reached technological feasibility and for which Biomatrica had substantially completed development as of the date of acquisition. Fair value was determined using future discounted cash flows related to the projected income stream of the developed technology for a discrete projection period. Cash flows were discounted to their present value as of the closing date. Developed technology is amortized on a straight-line basis over its estimated useful life of 15 years.
Customer relationships and contracts represent agreements with existing Biomatrica customers. Customer relationships and contracts are amortized on a straight-line basis over their estimated useful life of 15 years.

The goodwill generated from the acquisition of Biomatrica is primarily related to expected synergies. The total goodwill related to this acquisition is not deductible for tax purposes.

The partial year results for Biomatrica’s operations are included in the Company’s consolidated financial statements and not disclosed separately due to immateriality. Pro forma disclosures have not been included due to immateriality.

(14) SEGMENT INFORMATION

Management determined that the Company functions as a single operating segment, and thus reports as a single reportable segment. This operating segment is focused on the development and global commercialization of clinical laboratory services that focus on the early detection of cancer and analysis of the underlying biology of cancer, allowing healthcare providers and patients to make individualized treatment decisions. Management assessed the discrete financial information routinely reviewed by the Company’s Chief Operating Decision Maker (“CODM”), its President and Chief Executive Officer, to monitor the Company's operating performance and support decisions regarding allocation of resources to its operations. Performance is continuously monitored at the consolidated level to timely identify deviations from expected results.

The following table summarizes total revenue from customers by geographic region. Product revenues are attributed to countries based on ship-to location.

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>Year Ended December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>United States</td>
<td>$864,849</td>
</tr>
<tr>
<td>Outside of United States</td>
<td>11,444</td>
</tr>
<tr>
<td>Total revenues</td>
<td>$876,293</td>
</tr>
</tbody>
</table>

Long-lived assets located in countries outside of the United States are not significant.

(15) INCOME TAXES

Under financial accounting standards, deferred tax assets or liabilities are computed based on the differences between the financial statement and income tax bases of assets and liabilities using the enacted tax rates. Deferred income tax expense or benefit represents the change in the deferred tax assets or liabilities from period to period. At December 31, 2019, the Company had federal net operating loss, state net operating loss, and foreign net operating loss carryforwards of approximately $1,548.4 million, $672.7 million, and $18.1 million, respectively for financial reporting purposes, which may be used to offset future taxable income. The Company also had federal and state research tax credit carryforwards of $39.1 million and $27.5 million, respectively which may be used to offset future income tax liability. The federal credit carryforwards expire at various dates through 2039 with a portion expiring in 2019, and the remaining credits are subject to review and possible adjustment by the Internal Revenue Service. A portion of the state credit carryforwards expired in 2019 and the remainder begin to expire in 2020 through 2034 with the exception of California research and development tax credits that have an indefinite carryforward period. All state tax credits are subject to review and possible adjustment by local tax jurisdictions. In the event of a change of ownership, the federal and state net operating loss and research and development tax credit carryforwards may be subject to annual limitations provided by the Internal Revenue Code and similar state provisions.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the “Tax Act”). The Tax Act makes broad and complex changes to the U.S. tax code, including, but not limited to, the following that impact the Company: (1) reducing the U.S. federal corporate income tax rate from 35 percent to 21 percent; (2) eliminating the corporate alternative minimum tax; (3) creating a new limitation on deductible interest expense; (4) limiting the deductibility of certain executive compensation; and (5) limiting certain other deductions.
The expense (benefit) for income taxes consists of:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Current expense (benefit):</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>$ —</td>
</tr>
<tr>
<td>State</td>
<td>314</td>
</tr>
<tr>
<td>Foreign</td>
<td>(63)</td>
</tr>
<tr>
<td>Deferred tax expense (benefit):</td>
<td></td>
</tr>
<tr>
<td>Federal</td>
<td>(169,727)</td>
</tr>
<tr>
<td>State</td>
<td>(15,397)</td>
</tr>
<tr>
<td>Foreign</td>
<td>15</td>
</tr>
<tr>
<td>Total income tax expense (benefit)</td>
<td></td>
</tr>
<tr>
<td>$ (184,858)</td>
<td>$ 92</td>
</tr>
</tbody>
</table>

The Company recorded an income tax benefit for the year ended December 31, 2019 of $184.9 million. This was primarily due to an income tax benefit of $185.1 million recorded as a result of a change in the deferred tax asset valuation allowance resulting from the Genomic Health combination. In connection with the Genomic Health combination, a deferred tax liability was recorded for identified intangible assets. These deferred tax liabilities are considered a source of future taxable income which allowed the Company to reduce its pre-combination deferred tax asset valuation allowance. The change in pre-combination deferred tax asset valuation allowance of an acquirer is a transaction recognized separate from the business combination and reduces income tax expense in the period of the business combination.

The components of the net deferred tax asset with the approximate income tax effect of each type of carryforward, credit and temporary differences are as follows:

<table>
<thead>
<tr>
<th>(In thousands)</th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>Deferred tax assets:</td>
<td></td>
</tr>
<tr>
<td>Operating loss carryforwards</td>
<td>$ 369,695</td>
</tr>
<tr>
<td>Tax credit carryforwards</td>
<td>51,030</td>
</tr>
<tr>
<td>Compensation related differences</td>
<td>33,378</td>
</tr>
<tr>
<td>Lease assets</td>
<td>30,782</td>
</tr>
<tr>
<td>Other temporary differences</td>
<td>7,049</td>
</tr>
<tr>
<td>Tax assets before valuation allowance</td>
<td>491,934</td>
</tr>
<tr>
<td>Less - Valuation allowance</td>
<td>(120,679)</td>
</tr>
<tr>
<td>Total deferred tax assets</td>
<td>$ 371,255</td>
</tr>
<tr>
<td>Deferred tax liabilities</td>
<td></td>
</tr>
<tr>
<td>Convertible notes</td>
<td>$ (83,163)</td>
</tr>
<tr>
<td>Amortization</td>
<td>(270,421)</td>
</tr>
<tr>
<td>Property, plant and equipment</td>
<td>(5,913)</td>
</tr>
<tr>
<td>Lease liabilities</td>
<td>(29,586)</td>
</tr>
<tr>
<td>Other temporary differences</td>
<td>(2,607)</td>
</tr>
<tr>
<td>Total deferred tax liabilities</td>
<td>(391,690)</td>
</tr>
<tr>
<td>Net deferred tax liabilities</td>
<td>$ (20,435)</td>
</tr>
</tbody>
</table>

A valuation allowance to reduce the deferred tax assets is reported if, based on the weight of the evidence, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The Company has incurred significant losses since its inception and due to the uncertainty of the amount and timing of future taxable income and the realization of deferred tax liabilities, management has determined that a valuation allowance of $120.7 million and $209.9 million at
December 31, 2019 and 2018, respectively, is necessary to reduce the tax assets to the amount that is more likely than not to be realized. Given the future limitations on and expiration of certain federal and state deferred tax assets, the recording of a valuation allowance resulted in a deferred tax liability of approximately $20.4 million remaining at the end of 2019, which is included in other long-term liabilities on the Company’s consolidated balance sheet. The overall change in valuation allowance for December 31, 2019 and 2018 was a decrease of $89.2 million and $4.4 million, respectively.

The effective tax rate differs from the statutory tax rate due to the following:

<table>
<thead>
<tr>
<th>Description</th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>U.S. Federal statutory rate</td>
<td>21.0 %</td>
</tr>
<tr>
<td>State taxes</td>
<td>5.8</td>
</tr>
<tr>
<td>Federal and state tax rate changes</td>
<td>(0.4)</td>
</tr>
<tr>
<td>Foreign tax rate differential</td>
<td>0.6</td>
</tr>
<tr>
<td>Research and development tax credits</td>
<td>1.1</td>
</tr>
<tr>
<td>Stock-based compensation expense</td>
<td>22.1</td>
</tr>
<tr>
<td>Non-deductible executive compensation</td>
<td>(4.1)</td>
</tr>
<tr>
<td>Transaction costs</td>
<td>(0.7)</td>
</tr>
<tr>
<td>Other adjustments</td>
<td>(0.6)</td>
</tr>
<tr>
<td>Valuation allowance</td>
<td>24.0</td>
</tr>
<tr>
<td>Effective tax rate</td>
<td>68.8 %</td>
</tr>
</tbody>
</table>

As of December 31, 2019, the Company had a total of $10.3 million of unrecognized tax benefits related to federal and state research and development tax credits. These amounts have been recorded as a reduction to our deferred tax asset. Included in this amount is $6.2 million of unrecognized tax benefits related to research and development tax credits acquired as a result of the Genomic Health combination. The balance of unrecognized tax benefits as of December 31, 2019 and 2018 of $10.3 million and $1.9 million respectively, if recognized, would affect the effective tax rate.

The following is a tabular reconciliation of the amounts of unrecognized tax benefits:

<table>
<thead>
<tr>
<th>Description</th>
<th>December 31,</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
</tr>
<tr>
<td>January 1,</td>
<td>$1,926</td>
</tr>
<tr>
<td>Increase due to current year tax positions</td>
<td>2,142</td>
</tr>
<tr>
<td>Increase due to prior year tax positions</td>
<td>6,208</td>
</tr>
<tr>
<td>Decrease due to prior year tax positions</td>
<td>—</td>
</tr>
<tr>
<td>Settlements</td>
<td>—</td>
</tr>
<tr>
<td>December 31,</td>
<td>$10,276</td>
</tr>
</tbody>
</table>

As of December 31, 2019, due to the carryforward of unutilized net operating losses and research and development credits, the Company is subject to U.S. federal income tax examinations for the tax years 2000 through 2019, and to state income tax examinations for the tax years 2003 through 2019. There were no interest or penalties related to income taxes that have been accrued or recognized as of and for the years ended December 31, 2019, 2018 and 2017.

(16) RELATED PARTY TRANSACTIONS

The Company did not enter into any transactions material to the financial statements with related parties for the years ended December 31, 2019, 2018 and 2017.
(17) SUBSEQUENT EVENTS

On February 11, 2020, the Company entered into a definitive agreement and plan of merger (the “Paradigm Merger Agreement”) with Paradigm Diagnostics, Inc. (“Paradigm”), pursuant to which, among other things, one of the Company's wholly owned subsidiaries will be merged with and into Paradigm, with Paradigm surviving as a wholly owned subsidiary of the Company (the "Paradigm Merger"), in a stock transaction. The Paradigm Merger was unanimously approved by the boards of directors of Paradigm and the Company. The Company currently expects the Paradigm Merger to close by the end of March 2020, subject to customary closing conditions, including the approval of stockholders of Paradigm.

On February 11, 2020, the Company entered into a definitive agreement and plan of merger (the “Viomics Merger Agreement”) with Viomics, Inc. (“Viomics”), pursuant to which, among other things, one of the Company's wholly owned subsidiaries will be merged with and into Viomics, with Viomics surviving as a wholly owned subsidiary of the Company (the “Viomics Merger”), in a cash and stock transaction. The Viomics Merger was unanimously approved by the board of directors of Viomics and the Company. The Company currently expects the Viomics Merger to close by the end of March 2020, subject to customary closing conditions, including the approval of stockholders of Viomics.
(17) QUARTERLY RESULTS OF OPERATIONS (UNAUDITED)

The following table sets forth unaudited quarterly statements of operations data for each of the eight quarters ended December 31, 2019 and 2018. In the opinion of management, this information has been prepared on the same basis as the audited consolidated financial statements appearing elsewhere in this Form 10-K, and all necessary adjustments, consisting only of normal recurring adjustments, have been included in the amounts stated below to present fairly the unaudited quarterly results of operations. The quarterly data should be read in conjunction with the Company’s audited consolidated financial statements and the notes to the consolidated financial statements appearing elsewhere in this Form 10-K.

<table>
<thead>
<tr>
<th>Quarter Ended</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 31, 2019</td>
</tr>
<tr>
<td><strong>Revenue</strong></td>
</tr>
<tr>
<td><strong>Operating expenses:</strong></td>
</tr>
<tr>
<td>Cost of sales (exclusive of amortization of acquired intangibles)</td>
</tr>
<tr>
<td>Research and development</td>
</tr>
<tr>
<td>Sales and marketing</td>
</tr>
<tr>
<td>General and administrative</td>
</tr>
<tr>
<td>Amortization of acquired intangibles</td>
</tr>
<tr>
<td><strong>Loss from operations</strong></td>
</tr>
<tr>
<td><strong>Investment income</strong></td>
</tr>
<tr>
<td><strong>Interest expense</strong></td>
</tr>
<tr>
<td><strong>Net loss before tax</strong></td>
</tr>
<tr>
<td><strong>Income tax benefit (expense)</strong></td>
</tr>
<tr>
<td><strong>Net income (loss)</strong></td>
</tr>
<tr>
<td><strong>Net income (loss) per share—basic</strong></td>
</tr>
<tr>
<td><strong>Net income (loss) per share—diluted</strong></td>
</tr>
<tr>
<td><strong>Weighted average common shares outstanding—basic</strong></td>
</tr>
<tr>
<td><strong>Weighted average common shares outstanding—diluted</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
</tr>
<tr>
<td><strong>Operating expenses:</strong></td>
</tr>
<tr>
<td>Cost of sales (exclusive of amortization of acquired intangibles)</td>
</tr>
<tr>
<td>Research and development</td>
</tr>
<tr>
<td>Sales and marketing</td>
</tr>
<tr>
<td>General and administrative</td>
</tr>
<tr>
<td>Amortization of acquired intangibles</td>
</tr>
<tr>
<td><strong>Loss from operations</strong></td>
</tr>
<tr>
<td><strong>Investment income</strong></td>
</tr>
<tr>
<td><strong>Interest expense</strong></td>
</tr>
<tr>
<td><strong>Net loss before tax</strong></td>
</tr>
<tr>
<td><strong>Income tax benefit (expense)</strong></td>
</tr>
<tr>
<td><strong>Net loss</strong></td>
</tr>
<tr>
<td><strong>Net loss per share—basic and diluted</strong></td>
</tr>
<tr>
<td><strong>Weighted average common shares outstanding—basic and diluted</strong></td>
</tr>
</tbody>
</table>
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

There have been no disagreements with accountants on accounting or financial disclosure matters.

Item 9A. Controls and Procedures

On November 8, 2019, we completed the combination with Genomic Health, Inc. The acquired business constituted approximately 8% of the our total consolidated assets (excluding goodwill and intangible assets related to the transaction, which were integrated into our systems and control environment) and 8% of the total consolidated revenue included in our consolidated financial statements as of and for the year ended December 31, 2019. We are in the process of evaluating the existing controls and procedures of the acquired business and integrating the acquired business into our system of internal control over financial reporting. In accordance with SEC staff guidance permitting a company to exclude an acquired business from management’s assessment of the effectiveness of internal control over financial reporting for the year in which the combination is completed, we have excluded from the below assessment of our disclosure controls and procedures the disclosure controls and procedures of the acquired business and we have excluded the acquired business from our assessment of the effectiveness of our internal control over financial reporting as of December 31, 2019.

Evaluation of Disclosure Controls and Procedures.

As required by Rule 13a-15(b) under the Securities Exchange Act of 1934 (the “Exchange Act”), our management, including our principal executive officer and principal financial officer, conducted an evaluation as of the end of the period covered by this report, of the effectiveness of our disclosure controls and procedures as defined in Rule 13a-15(e) under the Exchange Act. Based on that evaluation, our principal executive officer and principal financial officer have concluded that these disclosure controls and procedures were effective as of December 31, 2019 to provide reasonable assurance that information required to be disclosed by us in reports that we file under the Exchange Act is recorded, processed, summarized, and reported, within the time periods specified in Securities and Exchange Commission rules and forms and that material information relating to the Company is accumulated and communicated to management, including our principal executive officer and our principal financial officer, as appropriate to allow timely decisions regarding required disclosures.

Changes in Internal Control over Financial Reporting.

Except for the combination with Genomic Health, Inc. on November 8, 2019, as described below, there were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) under the Exchange Act during the quarter ended December 31, 2019, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.


Management of the Company is responsible for establishing and maintaining effective internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act. The Company’s internal control over financial reporting is designed to provide reasonable assurance to the Company’s management and board of directors regarding the preparation and fair presentation of published financial statements in accordance with generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

As indicated above, the evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2019 excluded the business of Genomic Health that the Company acquired in November 2019. Genomic Health accounted for approximately 8% of the total consolidated assets (excluding goodwill and intangible assets related to the transaction, which were integrated into our systems and control environment) and 8% of the total consolidated revenue included in our consolidated financial statements as of and for the year ended December 31, 2019.
Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2019. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in *Internal Control—Integrated Framework (2013).* Based on our assessment, we concluded that, as of December 31, 2019, our internal control over financial reporting was effective based on those criteria.

Our independent registered public accounting firm, BDO USA, LLP, has issued an audit report on the effectiveness of our internal control over financial reporting as of December 31, 2019, which is included herein.

**Item 9B. Other Information**

None.

**PART III**

**Item 10. Directors, Executive Officers and Corporate Governance**

The information required under this item is incorporated by reference to the following sections of our proxy statement for our 2020 Annual Meeting of Stockholders: “Information Concerning Directors and Nominees for Director,” “Information Concerning Executive Officers,” “Section 16(a) Beneficial Ownership Reporting Compliance,” “Corporate Governance Principles and Board Matters,” and “The Board of Directors and Its Committees.”

**Item 11. Executive Compensation**

The information required under this item is incorporated by reference to the following sections of our proxy statement for our 2020 Annual Meeting of Stockholders: “Compensation and Other Information Concerning Directors and Officers,” “The Board of Directors and Its Committees,” and “Report of The Compensation Committee.”

**Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters**

The information required under this item is incorporated by reference to the following sections of our proxy statement for our 2020 Annual Meeting of Stockholders: “Equity Compensation Plan Information” and “Securities Ownership of Certain Beneficial Owners and Management.”

**Item 13. Certain Relationships and Related Transactions, and Director Independence**

The information required under this item is incorporated by reference to the following sections of our proxy statement for our 2020 Annual Meeting of Stockholders: “Certain Relationships and Related Transactions” and “Corporate Governance Principles and Board Matters.”

**Item 14. Principal Accountant Fees and Services**

The information required under this item is incorporated by reference to the following sections of our proxy statement for our 2020 Annual Meeting of Stockholders: “Independent Registered Public Accounting Firm” and “Pre-Approval Policies and Procedures.”
PART IV

Item 15. Exhibits and Financial Statement Schedules

(a) The following documents are filed as part of this Form 10-K:
(1) Financial Statements (see “Consolidated Financial Statements and Supplementary Data” at Item 8 and incorporated herein by reference).
(2) Financial Statement Schedules (Schedules to the Financial Statements have been omitted because the information required to be set forth therein is not applicable or is shown in the accompanying Financial Statements or notes thereto).
(3) Exhibits

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Exhibit Description</th>
<th>Filed with this Report</th>
<th>Incorporated by Reference herein from Form or Schedule</th>
<th>Filing Date</th>
<th>SEC File/ Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Agreement and Plan of Merger, dated July 28, 2019, by and among the Registrant, Spring Acquisition Corp. and Genomic Health, Inc.</td>
<td>8-K (Exhibit 2.1)</td>
<td></td>
<td>7/30/2019</td>
<td>333-48812</td>
</tr>
<tr>
<td>3.1</td>
<td>Sixth Amended and Restated Certificate of Incorporation of the Registrant</td>
<td>S-1 (Exhibit 3.3)</td>
<td></td>
<td>12/4/2000</td>
<td>333-48812</td>
</tr>
<tr>
<td>3.2</td>
<td>First Amendment to Sixth Amended and Restated Certificate of Incorporation of the Registrant</td>
<td>DEF 14A (Appendix B)</td>
<td></td>
<td>6/20/2014</td>
<td>001-35092</td>
</tr>
<tr>
<td>3.3</td>
<td>Fourth Amended and Restated By-Laws of the Registrant</td>
<td>8-K (Exhibit 3.1)</td>
<td></td>
<td>1/31/2020</td>
<td>001-35092</td>
</tr>
<tr>
<td>4.1</td>
<td>Specimen certificate representing the Registrant’s Common Stock</td>
<td>S-1 (Exhibit 4.1)</td>
<td></td>
<td>12/26/2000</td>
<td>333-48812</td>
</tr>
<tr>
<td>4.2</td>
<td>Indenture, dated January 17, 2018, by and between the Registrant and U.S. Bank National Association, as Trustee</td>
<td>8-K (Exhibit 4.1)</td>
<td></td>
<td>1/17/2018</td>
<td>001-35092</td>
</tr>
<tr>
<td>4.3</td>
<td>First Supplemental Indenture, dated January 17, 2018, by and between the Registrant and U.S. Bank National Association, as Trustee (including the form of 1.0% Convertible Senior Notes due 2025)</td>
<td>8-K (Exhibit 4.2)</td>
<td></td>
<td>1/17/2018</td>
<td>001-35092</td>
</tr>
<tr>
<td>4.4</td>
<td>Second Supplemental Indenture, dated March 8, 2020, by and between the Registrant and U.S. Bank National Association, as Trustee (including the form of 0.3750% Convertible Senior Notes due 2027)</td>
<td>8-K (Exhibit 4.2)</td>
<td></td>
<td>3/8/2019</td>
<td>001-35092</td>
</tr>
</tbody>
</table>

Lease Agreements

<table>
<thead>
<tr>
<th>Exhibit Number</th>
<th>Exhibit Description</th>
<th>Filed with this Report</th>
<th>Incorporated by Reference herein from Form or Schedule</th>
<th>Filing Date</th>
<th>SEC File/ Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1</td>
<td>Second Amended and Restated Lease Agreement, dated September 28, 2018, by and between University Research Park Incorporated and the Registrant</td>
<td>10-K (Exhibit 10.1)</td>
<td></td>
<td>2/21/2019</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.2</td>
<td>Lease Agreement, dated June 25, 2013, by and between Tech Building I, LLC and Exact Sciences Laboratories, Inc.</td>
<td>10-Q (Exhibit 10.2)</td>
<td></td>
<td>8/2/2013</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.3</td>
<td>Lease Agreement, dated November 11, 2015, by and between Metropolitan Life Insurance Company and Genomic Health, Inc.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.4</td>
<td>First Amendment to Lease Agreement, dated October 4, 2019, by and between Metropolitan Life Insurance Company and Genomic Health, Inc.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.5</td>
<td>Lease Agreement, dated September 23, 2005, by and between Metropolitan Life Insurance Company and Genomic Health, Inc.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.6</td>
<td>First Amendment to Lease Agreement, dated September 5, 2006, by and between Metropolitan Life Insurance Company and Genomic Health, Inc.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.7</td>
<td>Second Amendment to Lease Agreement, dated November 30, 2010, by and between Metropolitan Life Insurance Company and Genomic Health, Inc.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.8</td>
<td>Third Amendment to Lease Agreement, dated November 11, 2015, by and between Metropolitan Life Insurance Company and Genomic Health, Inc.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.9</td>
<td>Fourth Amendment to Lease Agreement, dated October 4, 2019, by and between Metropolitan Life Insurance Company and Genomic Health, Inc.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Agreements with Executive Officers and Directors**

| 10.10* | Employment Agreement, dated March 18, 2009, by and between Kevin T. Conroy and the Registrant | 8-K (Exhibit 10.1) | 3/18/2009 | 000-32179 |
| 10.11* | Employment Agreement, dated November 8, 2016, by and between Jeffrey T. Elliott and the Registrant | 10-K (Exhibit 10.9) | 2/21/2017 | 001-35092 |
| 10.12* | Employment Agreement, dated April 2, 2018, by and between Mark Stenhouse and the Registrant | 10-Q (Exhibit 10.2) | 10/30/2018 | 001-35092 |
| 10.13* | Employment Agreement, dated September 1, 2017, by and between Torsten Hoof and Genomic Health International Sàrl | X |
| 10.14* | First Amendment to Employment Agreement, dated September 11, 2017, by and between Torsten Hoof and Genomic Health International Sàrl | X |
| 10.15* | Second Amendment to Employment Agreement, dated November 13, 2020, by and between Torsten Hoof and Genomic Health International Sàrl | X |
| 10.16* | Retention Bonus and Retention Equity Letter Agreement, dated as of November 15, 2020, by and between G. Brad Cole and the Registrant | X |
## Table of Contents

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>filing</th>
<th>Date</th>
<th>CIK</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.17*</td>
<td>Employment Agreement, dated February 18, 2019, by and between Jacob Orville and the Registrant</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Equity Compensation Plans and Policies

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>filing</th>
<th>Date</th>
<th>CIK</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.18*</td>
<td>2000 Stock Option and Incentive Plan (Exhibit 10.2)</td>
<td>10-K</td>
<td>3/31/2009</td>
<td>000-32179</td>
</tr>
<tr>
<td>10.19*</td>
<td>The Registrant’s 2010 Employee Stock Purchase Plan (Appendix B)</td>
<td>DEF 14A</td>
<td>4/30/2010</td>
<td>000-32179</td>
</tr>
<tr>
<td>10.20*</td>
<td>First Amendment to the Registrant’s 2010 Employee Stock Purchase Plan (Appendix A)</td>
<td>DEF 14A</td>
<td>6/20/2014</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.21*</td>
<td>Second Amendment to the Registrant’s 2010 Employee Stock Purchase Plan (Appendix A)</td>
<td>DEF 14A</td>
<td>4/29/2016</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.22*</td>
<td>The Registrant’s 2016 Inducement Award Plan (Exhibit 10.3)</td>
<td>10-Q</td>
<td>5/3/2016</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.23*</td>
<td>The Registrant’s 2016 Inducement Award Plan Form Restricted Stock Unit Award Agreement (Exhibit 4.7)</td>
<td>S-8</td>
<td>5/3/2016</td>
<td>333-211099</td>
</tr>
<tr>
<td>10.24*</td>
<td>The Registrant’s 2010 Omnibus Long-Term Incentive Plan (As Amended and Restated Effective July 27, 2017) (Exhibit 10.1)</td>
<td>10-Q</td>
<td>10/30/2017</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.25**</td>
<td>The Registrant's Non-Employee Director Compensation Policy dated January 29, 2019 (Exhibit 10.20)</td>
<td>10-K</td>
<td>2/21/2019</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.27*</td>
<td>Third Amendment to the Registrant's 2010 Employee Stock Purchase Plan (Exhibit 10.1)</td>
<td>10-Q</td>
<td>7/30/2019</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.28*</td>
<td>The Registrant's 2019 Omnibus Long-Term Incentive Plan (Exhibit 4.4)</td>
<td>S-8</td>
<td>7/31/2019</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.29*</td>
<td>The Registrant's 2019 Omnibus Long-Term Incentive Plan Form Stock Option Award Agreement</td>
<td>X</td>
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<tr>
<td>10.30*</td>
<td>The Registrant's 2019 Omnibus Long-Term Incentive Plan Form Restricted Stock Unit Award Agreement</td>
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<tr>
<td>10.31*</td>
<td>The Registrant's 2019 Omnibus Long-Term Incentive Plan Form Restricted Stock Award Agreement</td>
<td>X</td>
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<td></td>
</tr>
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</table>

### Credit Agreements

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>filing</th>
<th>Date</th>
<th>CIK</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.32</td>
<td>Loan and Security Agreement, dated as of December 15, 2017, by and among MB Financial Bank, N.A., the Registrant and Exact Sciences Laboratories, LLC (Exhibit 10.1)</td>
<td>8-K</td>
<td>12/18/2017</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.33</td>
<td>Loan Agreement, dated as of December 15, 2017, by and between MB Financial Bank, N.A. and CG Growth LLC (Exhibit 10.2)</td>
<td>8-K</td>
<td>12/18/2017</td>
<td>001-35092</td>
</tr>
</tbody>
</table>

### Other

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<th>CIK</th>
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<tbody>
<tr>
<td>10.34**</td>
<td>Technology License Agreement dated as of October 14, 2009 by and among Hologic, Inc., Third Wave Technologies, Inc., and the Registrant (Exhibit 10.39)</td>
<td>10-K</td>
<td>3/12/2010</td>
<td>000-32179</td>
</tr>
<tr>
<td>Exhibit</td>
<td>Description</td>
<td>Filing</td>
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<td>SEC File No.</td>
</tr>
<tr>
<td>---------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------</td>
<td>-----------</td>
<td>--------------</td>
</tr>
<tr>
<td>10.36**</td>
<td>Amended and Restated License Agreement dated effective January 31, 2015, by and between the Registrant and Mayo Foundation for Medical Education and Research</td>
<td>10-Q</td>
<td>5/4/2015</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.37**</td>
<td>First Amendment dated effective July 1, 2015 to Amended and Restated License Agreement dated effective January 31, 2015, by and between the Registrant and Mayo Foundation for Medical Education and Research</td>
<td>10-Q/A</td>
<td>6/3/2016</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.38**</td>
<td>Second Amendment dated effective October 1, 2017 to Amended and Restated License Agreement dated effective January 31, 2015, by and among the Registrant, Mayo Foundation for Medical Education and Research and Exact Sciences Development Company, LLC</td>
<td>10-K</td>
<td>2/22/2018</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.39**</td>
<td>Third Amendment dated effective October 1, 2017 to Amended and Restated License Agreement dated effective January 1, 2020, by and among the Registrant, Mayo Foundation for Medical Education and Research and Exact Sciences Development Company, LLC</td>
<td>10-K</td>
<td>2/21/2019</td>
<td>001-35092</td>
</tr>
<tr>
<td>10.40</td>
<td>Promotion Agreement dated August 21, 2018 between the Registrant and Pfizer, Inc.</td>
<td>8-K</td>
<td>8/22/2018</td>
<td>001-35092</td>
</tr>
</tbody>
</table>

21     | Subsidiaries of the Registrant                                                                                                                                  | X      |           |              |
23.1   | Consent of BDO USA, LLP                                                                                                                                           | X      |           |              |
24.1   | Power of Attorney (included on signature page)                                                                                                                | X      |           |              |
31.1   | Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934                                                             | X      |           |              |
31.2   | Certification Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934                                                             | X      |           |              |
32     | Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002                                              | X      |           |              |
<table>
<thead>
<tr>
<th>Page</th>
<th>Description</th>
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<tbody>
<tr>
<td>104</td>
<td>The cover page from the Annual Report on Form 10-K of Exact Sciences Corporation for the year ended December 31, 2020 filed with the Securities and Exchange Commission on February 21, 2020, formatted in Inline eXtensible Business Reporting Language (“iXBRL”).</td>
</tr>
</tbody>
</table>

(*) Indicates a management contract or any compensatory plan, contract or arrangement.

(**) Confidential Treatment requested for certain portions of this Agreement.

**Item 16. Form 10-K Summary**

Not applicable.
SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

EXACT SCIENCES CORPORATION

Date: February 21, 2020

By: /s/ Kevin T. Conroy

Kevin T. Conroy
President & Chief Executive Officer

POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Exact Sciences Corporation, hereby severally constitute and appoint Kevin T. Conroy our true and lawful attorney, with full power to him to sign for us and in our names in the capacities indicated below, any amendments to this Annual Report on Form 10-K, and generally to do all things in our names and on our behalf in such capacities to enable Exact Sciences Corporation to comply with the provisions of the Securities Exchange Act of 1934, as amended, and all the requirements of the Securities Exchange Commission.

Pursuant to the requirements of the Securities and Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>s/ Kevin T. Conroy</td>
<td>President and Chief Executive Officer (Principal Executive Officer) and Chairman of the Board</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>Kevin T. Conroy</td>
<td>Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ Jeffrey T. Elliott</td>
<td>Director</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ Thomas D. Carey</td>
<td>Director</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ Eli Casdin</td>
<td>Director</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ James E. Doyle</td>
<td>Lead Independent Director</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ Pierre Jacquet</td>
<td>Director</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ Daniel J. Levangie</td>
<td>Director</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ Kathleen Sebelius</td>
<td>Director</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ Andrew Slavitt</td>
<td>Director</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ Michael S. Wyzga</td>
<td>Director</td>
<td>February 21, 2020</td>
</tr>
<tr>
<td>/s/ Katherine Zanotti</td>
<td>Director</td>
<td>February 21, 2020</td>
</tr>
</tbody>
</table>
LEASE

BETWEEN

METROPOLITAN LIFE INSURANCE COMPANY (LANDLORD)

AND

GENOMIC HEALTH, INC. (TENANT)

SEAPORT CENTRE

Redwood City, California
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<td>ARTICLE SEVEN POSSESSION, USE AND CONDITION OF PREMISES</td>
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<td>7.01 POSSESSION AND USE OF PREMISES</td>
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<td>8.01 LANDLORD’S MAINTENANCE</td>
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<td>8.02 TENANTS MAINTENANCE</td>
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<tr>
<td>8.03 ADDITIONAL PROVISIONS REGARDING HVAC</td>
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<tr>
<td>ARTICLE NINE ALTERATIONS AND IMPROVEMENTS</td>
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20.01 IN GENERAL
20.02 ENFORCEMENT
ARTICLE TWENTY-ONE INTENTIONALLY OMITTED
ARTICLE TWENTY-TWO REAL ESTATE BROKERS
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  23.02 MORTGAGEE PROTECTION
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ARTICLE TWENTY-FIVE EXERCISE FACILITY
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  26.01 LATE CHARGES
  26.02 NO JURY TRIAL; VENUE; JURISDICTION
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  26.05 TENANT AUTHORITY
  26.06 ENTIRE AGREEMENT
  26.07 MODIFICATION OF LEASE FOR BENEFIT OF MORTGAGEE
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  26.09 ACCORD AND SATISFACTION
  26.10 LANDLORD’S OBLIGATIONS ON SALE OF BUILDING
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  26.13 TIME; APPLICABLE LAW; CONSTRUCTION
  26.14 ABANDONMENT
  26.15 LANDLORD’S RIGHT TO PERFORM TENANTS DUTIES
  26.16 SECURITY SYSTEM
  26.17 NO LIGHT, AIR OR VIEW EASEMENTS
  26.18 RECORDATION
  26.19 SURVIVAL
  26.20 EXHIBITS OR RIDERS
LEASE

ARTICLE ONE
BASIC LEASE PROVISIONS

1.01 BASIC LEASE PROVISIONS

In the event of any conflict between these Basic Lease Provisions and any other Lease provision, such other Lease provision shall control.

(1) BUILDING AND ADDRESS:

As of the Date of Lease, the Building has street addresses of 301 & 351 Penobscot Drive Redwood City, California 94063 Building Number 11, located in Phase II (“Tenants Phase”) of Seaport Centre

(2) LANDLORD AND ADDRESS:

Metropolitan Life Insurance Company,
a New York corporation
Notices to Landlord shall be addressed:

    Metropolitan Life Insurance Company
do Seaport Centre Manager
    701 Chesapeake Drive
Redwood City, CA 94063

with copies to the following:

    Metropolitan Life Insurance Company
    400 South El Camino Real, Suite 800
    San Mateo, CA 94402
    Attention: Assistant Vice President

(3) TENANT; CURRENT ADDRESS & TAX ID:

(a) Name: Genomic Health, Inc. (“Genomic Health”)
(b) State of incorporation: a Delaware corporation
(c) Tax Identification Number 77-0552594

Tenant shall notify Landlord of any change in the foregoing.

Notices to Tenant shall be addressed:

    Genomic Health, Inc.
    301 Penobscot Drive
    Redwood City, CA 94063
    Attention: Chief Financial Officer

with a copy to:

    Pillsbury Winthrop Shaw Pittman LLP
    50 Fremont Street
    San Francisco, CA 94105
    Attention: Hilda A. Senseney

(4) DATE OF LEASE: as of September __, 2005

(5) LEASE TERM: For each of the Initial Premises and the Expansion Premises, the Term will commence separately on the Initial Premises Commencement Date and the Expansion Premises Commencement Date, as defined and described in
Rider 2, and the Lease Term shall expire (as to the entire Premises) on the last day of the six-year period which commences on the Initial Premises Commencement Date.

(6) COMMENCEMENT DATES: For each of the Initial Premises and the Expansion Premises, the Term will commence separately on the Initial Premises Commencement Date and the Expansion Premises Commencement Date, as defined and described in Rider 2.
(7) EXPIRATION DATE: The last day of the six-year period which commences on the Initial Premises Commencement Date.

(8) MONTHLY BASE RENT: Monthly Base Rent for the Premises is the combined Monthly Base Rent for each of the Initial Premises and the Expansion Premises, as and when due as set forth in this Lease. In light of the differences for each such space in the respective rate of Monthly Base Rent, timing of the Commencement Date and increases in rates, the amount of Monthly Base Rent for each such space is set forth separately below. The initial monthly installment for both parts of the Premises is due upon Tenant’s execution.

**Initial Premises:**

<table>
<thead>
<tr>
<th>Period from Initial Premises Commencement Date through Expiration Date</th>
<th>Monthly</th>
<th>Monthly Rate/SF of Rentable Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months 01 — 12*</td>
<td>$24,448.90*</td>
<td>$1.06*</td>
</tr>
<tr>
<td>Months 13 — 24</td>
<td>$25,140.85</td>
<td>$1.09</td>
</tr>
<tr>
<td>Months 25 — 36</td>
<td>$25,832.80</td>
<td>$1.12</td>
</tr>
<tr>
<td>Months 37 — 48</td>
<td>$26,755.40</td>
<td>$1.16</td>
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<tr>
<td>Months 49 — 60</td>
<td>$27,447.35</td>
<td>$1.19</td>
</tr>
<tr>
<td>Months 61 — 72 (Expiration Date)</td>
<td>$28,369.95</td>
<td>$1.23</td>
</tr>
</tbody>
</table>

*Notwithstanding any provision of this Lease to the contrary, provided that Tenant is not in Default under this Lease, Landlord agrees to forbear in collection of the Monthly Base Rent for the Initial Premises for the first four (4) months after the Initial Premises Commencement Date, and further provided that Tenant is not in Default under this Lease for a full year after expiration of the fourth month of the Term, the Monthly Base Rent for the Initial Premises for such first four months of the Term shall be waived.

**Expansion Premises:**

<table>
<thead>
<tr>
<th>Period from Expansion Premises Commencement Date through Expiration Date</th>
<th>Monthly</th>
<th>Monthly Rate/SF of Rentable Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Months 01 — 12*</td>
<td>$34,769.00*</td>
<td>$1.40*</td>
</tr>
<tr>
<td>Months 13 — 24</td>
<td>$36,010.75</td>
<td>$1.45</td>
</tr>
<tr>
<td>Months 25 — 36</td>
<td>$37,252.50</td>
<td>$1.50</td>
</tr>
<tr>
<td>Months 37 — 48</td>
<td>$38,494.25</td>
<td>$1.55</td>
</tr>
<tr>
<td>Months 49 — 60</td>
<td>$39,376.00</td>
<td>$1.60</td>
</tr>
<tr>
<td>Months 61 — Expiration Date</td>
<td>$40,977.75</td>
<td>$1.65</td>
</tr>
</tbody>
</table>

*Notwithstanding any provision of this Lease to the contrary, provided that Tenant is not in Default under this Lease, Landlord agrees to forbear in collection of the Monthly Base Rent for the Expansion Premises for the first month after the Expansion Premises Commencement Date, and further provided that Tenant is not in Default under this Lease for a full year after expiration of such first month, the Monthly Base Rent for the Expansion Premises for such first month shall be waived.

(9) RENT ADJUSTMENT DEPOSIT (initial monthly rate, until further notice): Until the Commencement Date has occurred for both the Initial Premises and the Expansion Premises, the Rent Adjustment Deposit payable by Tenant during the Term shall be only for that part of the Premises for which the Commencement Date has occurred. It is agreed that the Rent Adjustment Deposit (at the initial monthly rate, until further notice) for the Initial Premises shall be Fourteen Thousand Nineteen Dollars ($14,019.00). The initial monthly installment for both parts of the Premises is Twenty-nine Thousand One Hundred Fourteen Dollars ($29,114.00) and is due upon Tenant’s execution.

(10) RENTABLE AREA OF THE PREMISES:
Initial Premises: 23,065 square feet
Expansion Premises: 24,835 square feet
Premises (both parts): 47,900

(11) RENTABLE AREA OF THE BUILDING 47,900 square feet

(12) RENTABLE AREA OF THE PHASE: 235,620 square feet

(13) RENTABLE AREA OF THE PROJECT: 537,444 square feet

(14) SECURITY: The cash and/or Letter of Credit in the amount of Five Hundred Thousand Dollars and no/100 ($500,000.00) (and any proceeds of the Letter of Credit drawn and held by Landlord) as provided in Article Five.

(15) SUITE NUMBER &/OR ADDRESS OF PREMISES:

Initial Premises: 351 Penobscot Drive
Expansion Premises: 301 Penobscot Drive
Premises (both parts): 301 Penobscot Drive, until further notice

(16) TENANTS SHARE:

For Initial Premises only until Expansion Premises Commencement Date:
- Tenants Building Share: 48.1524%
- Tenant's Phase Share: 9.7891%
- Tenant's Project Share: 4.2916%

- Tenants Building Share: 100%
- Tenant's Phase Share: 20.3293%
- Tenant's Project Share: 8.9126%

(17) TENANT’S USE OF PREMISES: General office use; biotechnology/pharmaceutical research and development, assembly, biotechnical or pharmaceutical manufacturing, and warehousing.

(18) PARKING SPACES:

For Initial Premises only until Expansion Premises Commencement Date: 76 For Full Premises on & after Expansion Premises Commencement Date: 158

(19) BROKERS:

- Landlord’s Broker: Cornish & Carey Commercial
- Tenant’s Broker: BT Commercial and Technology Commercial

1.02 ENUMERATION OF EXHIBITS & RIDER(S)

The Exhibits and Rider(s) set forth below and attached to this Lease are incorporated in this Lease by this reference:

EXHIBIT A Plan of Premises
EXHIBIT B Workletter Agreement
EXHIBIT C Site Plan of Project
EXHIBIT D Permitted Hazardous Material
EXHIBIT E Form of Letter of Credit Acceptable from Silicon Valley Bank
RIDER 2 Additional Provisions
1.03 DEFINITIONS
For purposes hereof, the following terms shall have the following meanings:

**ADJUSTMENT YEAR:** The applicable calendar year or any portion thereof after the Commencement Date of this Lease for which a Rent Adjustment computation is being made.

**AFFILIATE:** Any Person (as defined below) which is controlled by, controls, or is under common control with Tenant. The word Person means an individual, partnership, trust, corporation, limited liability company, firm or other entity. For purposes of this definition, the word "control," means, with respect to a Person that is a corporation or a limited liability company, the right to exercise, directly or indirectly, more than sixty percent (60%) of the voting rights attributable to the shares or membership interests of the controlled Person and, with respect to a Person that is not a corporation, the possession, directly or indirectly, of the power at all times to direct or cause the direction of the management of the controlled Person.

**BUILDING:** Each building in which the Premises is located, as specified in Section 1.01(1). **BUILDING OPERATING EXPENSES:** Those Operating Expenses described in Section 4.01.

**COMMENCEMENT DATE:** The dates specified in Section 1.01(6) as the Commencement Dates, unless changed by operation of Article Two or Rider 2.

**COMMON AREAS:** All areas of the Project made available by Landlord from time to time for the general common use or benefit of the tenants of the Building or Project and their employees and invitees, or the public, as such areas currently exist and as they may be changed from time to time.

**DECORATION:** Tenant Alterations which do not require a building permit and which do not affect the facade or roof of the Building, or involve any of the structural elements of the Building, or involve any of the Building’s systems, including its electrical, mechanical, plumbing, security, heating, ventilating, air-conditioning, communication, and fire and life safety systems.

**DEFAULT RATE:** Two (2) percentage points above the rate then most recently announced by Bank of America N.T.& S.A. at its San Francisco main office as its corporate base lending rate, from time to time announced, but in no event higher than the maximum rate permitted by Law.

**DELIVERY DATE:** The date for Landlord’s delivery to Tenant of possession of the Premises, if different from the Commencement Date, as provided in Rider 2.

**ENVIRONMENTAL LAWS:** All Laws governing the use, storage, disposal or generation of any Hazardous Material or pertaining to environmental conditions on, under or about the Premises or any part of the Project, including the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended (42 U.S.C. Section 9601 et seq.), and the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. Section 6901 et seq.).

**EXPANSION PREMISES:** The space under the Prior Sublease (defined in Rider 2) which becomes part of the Premises on the Expansion Premises Commencement Date, as more particularly provided in this Lease. The Expansion Premises is deemed to be 24,835 square feet of Rentable Area, is commonly known as 301 -Penobscot Drive (as of the execution date of this Lease), is depicted on Exhibit A hereto, and is further described in Section 1.01, definition of Premises and Rider 2.

**EXPIRATION DATE:** The date specified in Section 1.01(7) unless changed by operation of Article Two or Rider 2.

**FORCE MAJERE:** Any accident, casualty, act of God, war or civil commotion, strike or labor troubles, or any cause whatsoever beyond the reasonable control of Landlord, including water shortages, energy shortages or governmental preemption in connection with an act of God, a national emergency, or by reason of Law, or by reason of the conditions of supply and demand which have been or are affected by act of God, war or other emergency.

**HAZARDOUS MATERIAL:** Such substances, material and wastes which are or become regulated under any Environmental Law; or which are classified as hazardous or toxic or medical waste or biohazardous waste under any Environmental Law; and explosives, firearms and ammunition, flammable material, radioactive material, asbestos, polychlorinated biphenyls and petroleum and its byproducts.
INITIAL PREMISES: The part of the Premises to be delivered initially to Tenant after execution of this Lease and part as to which the Term first commences, as more particularly provided in this Lease. The Initial Premises is deemed to be 23,065 square feet of Rentable Area, is commonly known as 351 Penobscot Drive (as of the execution date of this Lease), is depicted on Exhibit A hereto, and is further described in Section 1.01, definition of Premises and Rider 2.

INDEMNITEES: Collectively, Landlord, any Mortgagee or ground lessor of the Property, the property manager and the leasing manager for the Property and their respective directors, officers, agents and employees.

LAND: The parcel(s) of real estate on which the Building and Project are located.

LANDLORD WORK: The construction or installation of improvements to be furnished by Landlord, if any, specifically described in Rider 2 attached hereto.

LAWS OR LAW: All laws, ordinances, rules, regulations, other requirements, orders, rulings or decisions adopted or made by any governmental body, agency, department or judicial authority having jurisdiction over the Property, the Premises or Tenant’s activities at the Premises and any covenants, conditions or restrictions of record which affect the Property.

LEASE: This instrument and all exhibits and riders attached hereto, as may be amended from time to time.

LEASE YEAR: The twelve month period beginning on the first day of the first month following the Initial Premises Commencement Date (unless the Commencement Date is the first day of a calendar month in which case beginning on the Commencement Date), and each subsequent twelve month, or shorter, period until the Expiration Date.

MONTHLY BASE RENT: The monthly rent specified in Section 1.01(8).

MORTGAGEE: Any holder of a mortgage, deed of trust or other security instrument encumbering the Property.

NATIONAL HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day and other holidays recognized by the Landlord and the janitorial and other unions servicing the Building in accordance with their contracts.

OPERATING EXPENSES: All Taxes, costs, expenses and disbursements of every kind and nature which Landlord shall pay or become obligated to pay in connection with the ownership, management, operation, maintenance, replacement and repair of the Property (including the amortized portion of any capital expenditure or improvement, together with interest thereon, expenses of changing utility service providers, and any dues, assessments and other expenses pursuant to any covenants, conditions and restrictions, or any reciprocal easements, or any owner’s association now or hereafter affecting the Project; provided however that with respect to any expenses, dues, assessments and other expenses pursuant to any covenants, conditions and restrictions, or any reciprocal easements, or any owner’s association hereafter affecting the Project, then such costs and expenses shall only be deemed to be Operating Expenses to the extent that such costs or expenses could otherwise be deemed to be Operating Expenses pursuant to the provisions set forth in this section). Operating Expenses shall be allocated among the categories of Project Operating Expenses, Building Operating Expenses or Phase Operating Expenses as provided in Article Four. If any Operating Expense relates to more than one calendar year, such expense shall be proportionately allocated among such related calendar years. Operating Expenses shall include the following, by way of illustration only and not limitation: (1) all Taxes; (2) all insurance premiums and other costs (including deductibles), including the cost of rental insurance; (3) all license, permit and inspection fees; (4) all costs of utilities, fuels and related services, including water, sewer, light, telephone, power and steam connection, service and related charges; (5) all costs to repair, maintain and operate heating, ventilating and air conditioning systems, including preventive maintenance incurred by Landlord, if any; (6) all janitorial, landscaping and security services; (7) all wages, salaries, payroll taxes, fringe benefits and other labor costs, including the cost of workers’ compensation and disability insurance; (8) all costs of operation, maintenance and repair of all parking facilities and other common areas; (9) all supplies, materials, equipment and tools; (10) dues, assessments and other expenses pursuant to any covenants, conditions and restrictions, or any reciprocal easements, or any owner’s association now or hereafter affecting the Project; (11) modifications to the Building or the Project occasioned by Laws now or hereafter in effect, but only as amortized over the useful life of the capital item as reasonably determined by Landlord; (12) the
total charges of any independent contractors employed in the care, operation, maintenance, repair, leasing and cleaning of the Project, including landscaping, roof maintenance, and repair, maintenance and monitoring of life-safety systems, plumbing systems, electrical wiring and Project signage; (13) the cost of accounting services necessary to compute the rents and charges payable by tenants at the Project; (14) exterior window and exterior wall cleaning and painting; (15) managerial and administrative expenses; (16) all costs in connection with the exercise facility at the Project; (17) all costs and expenses related to Landlord’s retention of consultants in connection with the routine review, inspection, testing, monitoring, analysis and control of Hazardous Material, and retention of consultants in connection with the clean-up of Hazardous Material (to the extent not recoverable from a particular tenant of the Project), and all costs and expenses related to the implementation of recommendations made by such consultants concerning the use, generation, storage, manufacture, production, storage, release, discharge, disposal or clean-up of Hazardous Material on, under or about the Premises or the Project (to the extent not recoverable from a particular tenant of the Project); (18) all capital improvements made for the purpose of reducing or controlling other Operating Expenses, and all other capital expenditures, but only as amortized over the useful life of such capital improvement as reasonably determined by Landlord, together with interest on the unamortized portion; (19) all property management costs and fees, including all costs in connection with the Project property management office; and (20) all fees or other charges incurred in conjunction with voluntary or involuntary membership in any energy conservation, air quality, environmental, traffic management or similar organization. & Operating Expenses shall not include: (a) costs of alterations of space to be occupied by new or existing tenants of the Project; (b) depreciation charges; (c) interest and principal payments on loans (except for loans for capital expenditures or improvements which Landlord is allowed to include in Operating Expenses as provided above); (d) ground rental payments; (e) real estate brokerage and leasing commissions; (f) advertising and marketing expenses; (g) costs of Landlord reimbursed by insurance proceeds; (h) costs for which the Landlord is reimbursed by any other tenant or occupant of the Building (other than payments comparable to Rent Adjustments hereunder) or by any tenant’s insurance carrier or by anyone else, and electric power costs for which any tenant directly contracts with the local public service company; (i) expenses incurred in negotiating leases of other tenants in the Project or enforcing lease obligations of other tenants in the Project; (j) Landlord’s property manager’s corporate general overhead or corporate general administrative expenses; (k) the wages and benefits of any employee who does not devote substantially all of his or her employed time to the Building, Project or Phase, unless such wages and benefits are prorated to reflect time spent on operation and managing the Building, Project or Phase; (l) Landlord’s corporate general overhead or corporate general administrative expenses associated with the operation of the business of the entity which constitutes the Landlord, as the same are distinguished from the costs of operation of the Building, Project or Phase; (m) executives’ salaries; (n) any bad debt loss, rent loss, or reserves for bad debts or rent loss; (o) costs of Landlord’s charitable or political contributions; (p) the acquisition and installation costs of the replacement of 150 tons of HVAC (which includes mechanical units, associated controls and ductwork, and related materials and expenses), as described in Section 8.03 below; (q) the costs of any Tenant Work (as defined in the Workletter), and (r) costs incurred in connection with Hazardous Materials to the extent such Hazardous Materials were present on the Project prior to the Delivery Date.

PHASE: Phase means any individual Phase of the Project, as more particularly described in the definition of Project.

PHASE OPERATING EXPENSES: Those Operating Expenses described in Section 4.01.

PREMISES: The Premises consists of the entire Rentable Area of the Building at the initial Suite Number(s) listed in Section 1.01 and is depicted on Exhibit A attached hereto. The Premises is classified in two parts, namely the Initial Premises and the Expansion Premises, for purposes of separately determining and providing as to each part for the Delivery Date, Commencement Date of the Term and commencement of Rent as to each, and certain other rights and obligations of the parties, as more particularly provided in Rider 2, the Workletter and other provisions of this Lease.

PROJECT or PROPERTY: As of the date hereof, the Project is known as Seaport Centre and consists of those buildings (including the Building) whose general location is shown on the Site Plan of the Project attached as Exhibit C, located in Redwood City, California, associated vehicular and parking areas, landscaping and improvements, together with the Land, any associated interests in real property, and the personal property, fixtures, machinery, equipment, systems and apparatus located in or used in conjunction with any of the foregoing. The Project may also be referred to as the Property. As of the date hereof, the Project is divided into Phase I.
and Phase II, which are generally designated on Exhibit C, each of which may individually be referred to as a Phase. Landlord reserves the right from time to time to add or remove buildings, areas and improvements to or from a Phase or the Project, or to add or remove a Phase to or from the Project. In the event of any such addition or removal which affects Rentable Area of the Project or a Phase, Landlord shall make a corresponding recalculation and adjustment of any affected Rentable Area and Tenants Share.

PROJECT OPERATING EXPENSES: Those Operating Expenses described in Section 4.01.

REAL PROPERTY: The Property excluding any personal property.

RENT: Collectively, Monthly Base Rent Rent Adjustments and Rent Adjustment Deposits, and all other charges, payments, late fees or other amounts required to be paid by Tenant under this Lease.

RENT ADJUSTMENT: Any amounts owed by Tenant for payment of Operating Expenses. The Rent Adjustments shall be determined and paid as provided in Article Four.

RENT ADJUSTMENT DEPOSIT: An amount equal to Landlord’s estimate of the Rent Adjustment attributable to each month of the applicable Adjustment Year. On or before the Commencement Date and the beginning of each subsequent Adjustment Year or with Landlord’s Statement (defined in Article Four), Landlord may estimate and notify Tenant in writing of its estimate of Operating Expenses, including Project Operating Expenses, Building Operating Expenses and Phase Operating Expenses, and Tenant’s Share of each, for the applicable Adjustment Year. The Rent Adjustment Deposit applicable for the calendar year in which the Commencement Date occurs shall be the amount, if any, specified in Section 1.01(9). Nothing contained herein shall be construed to limit the right of Landlord from time to time during any calendar year to revise its estimates of Operating Expenses and to notify Tenant in writing thereof and of revision by prospective adjustments in Tenants Rent Adjustment Deposit payable over the remainder of such year. The last estimate by Landlord shall remain in effect as the applicable Rent Adjustment Deposit unless and until Landlord notifies Tenant in writing of a change.

RENTABLE AREA OF THE BUILDING: The amount of square footage set forth in Section 1.01(11)

RENTABLE AREA OF THE PHASE: The amount of square footage set forth in Section 1.01(12)

RENTABLE AREA OF THE PREMISES: The amount of square footage set forth in Section 1.01(10).

RENTABLE AREA OF THE PROJECT: The amount of square footage set forth in Section 1.01(13), which represents the sum of the rentable area of all space intended for occupancy in the Project.

SECURITY: The cash and/or Letter of Credit specified in Section 1.01, if any, paid or delivered to Landlord as security for Tenant’s performance of its obligations under this Lease, and any proceeds of the Letter of Credit drawn and held by Landlord, all as more particularly provided in Article Five.

SUBSTANTIALLY COMPLETE: The completion of the Landlord Work or Tenant Work, as the case may be, except for minor insubstantial details of construction, decoration or mechanical adjustments which remain to be done.

TAXES: All federal, state and local governmental taxes, assessments (including assessment bonds) and charges of every kind or nature, whether general, special, ordinary or extraordinary, which Landlord shall pay or become obligated to pay because of or in connection with the ownership, leasing, management, control or operation of the Property or any of its components (including any personal property used in connection therewith), which may also include any rental or similar taxes levied in lieu of or in addition to general real and/or personal property taxes. For purposes hereof, Taxes for any year shall be Taxes which are assessed for any period of such year, whether or not such Taxes are billed and payable in a subsequent calendar year. There shall be included in Taxes for any year the amount of all fees, costs and expenses (including reasonable attorneys’ fees) paid by Landlord during such year in seeking or obtaining any refund or reduction of Taxes. Taxes for any year shall be reduced by the net amount of any tax refund received by Landlord attributable to such year. If a special assessment payable in
installments is levied against any part of the Property, Taxes for any year shall include only the installment of such assessment and any interest payable or paid during such year. Taxes shall not include any federal or state inheritance, general income, gift or estate taxes, except that if a change occurs in the method of taxation resulting in whole or in part in the substitution of any such taxes, or any other assessment, for any Taxes as above defined, such substituted taxes or assessments shall be included in the Taxes.

TENANT ADDITIONS: Collectively, Landlord Work, Tenant Work and Tenant Alterations. Tenant’s Personal Property (as set forth in Exhibit G hereto) shall not be deemed to be included in the definition of Tenant Additions.

TENANT ALTERATIONS: Any alterations, improvements, additions, installations or construction in or to the Premises or any Real Property systems serving the Premises done or caused to be done by Tenant after the date hereof, whether prior to or after the Commencement Date (including Tenant Work, but excluding Landlord Work).

TENANT DELAY: Any event or occurrence which delays the Substantial Completion of the Landlord Work which is caused by or is described as follows:

(i) special work, changes, alterations or additions requested or made by Tenant in the design or finish in any part of the Premises after approval of the plans and specifications (as described in the Rider 2);

(ii) Tenant’s delay in submitting plans, supplying information, approving plans, specifications or estimates, giving authorizations or otherwise;

(iii) failure to approve and pay for such work as Landlord undertakes to complete at Tenant’s expense;

(iv) the performance or completion by Tenant or any person engaged by Tenant of any work in or about the Premises; or

(v) failure to perform or comply with any obligation or condition binding upon Tenant pursuant to Rider 2, including the failure to approve and pay for such Landlord Work or other items if and to the extent Rider 2 provides they are to be approved or paid by Tenant.

TENANT’S FF&E: The property of Tenant described in Section 5 of the Workletter.

TENANT’S PERSONAL PROPERTY: Tenant’s property described on Exhibit G hereto.

TENANT WORK: All work installed or furnished to the Premises by Tenant in connection with Tenant’s initial occupancy pursuant to Rider 2 and the Workletter.

TENANT’S BUILDING SHARE: The share as specified in Section 1.01(16) and Section 4.01.

TENANT’S PHASE: The Phase in which the Premises is located, as indicated in Section 1.01(1).

TENANT’S PHASE SHARE: The share as specified in Section 1.01(16) and Section 4.01.

TENANT’S PROJECT SHARE: The share as specified in Section 1.01(16) and Section 4.01.

TENANT’S SHARE: Shall mean collectively, Tenant’s respective shares of the respective categories of Operating Expenses, as provided in Section 1.01(16) and Section 4.01.

TERM: The term of this Lease commencing on the Initial Premises Commencement Date and expiring on the Expiration Date.

TERMINATION DATE: The Expiration Date or such earlier date as this Lease terminates or Tenant’s right to possession of the Premises terminates.

WORKLETTER: The Agreement regarding the completion of Tenant Work and Landlord Work, if any, set forth in Rider 2 and Exhibit B hereto.
2.01 LEASE OF PREMISES
Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the Premises for the Term and upon the terms, covenants and conditions provided in this Lease.

2.02 TERM (See Rider 2)

2.03 FAILURE TO GIVE POSSESSION (See Rider 2)

2.04 AREA OF PREMISES
Landlord and Tenant agree that for all purposes of this Lease the Rentable Area of the Premises, the Rentable Area of the Building, the Rentable Area of the Phase and the Rentable Area of the Project as set forth in Article One are controlling, and are not subject to revision after the date of this Lease, except as otherwise provided herein.

2.05 CONDITION OF PREMISES (See Rider 2)

2.06 COMMON AREAS & PARKING

(a) Right to Use Common Areas. Tenant shall have the non-exclusive right, in common with others, to the use of any common entrances, ramps, drives and similar access and serviceways and other Common Areas in the Project. The rights of Tenant hereunder in and to the Common Areas shall at all times be subject to the rights of Landlord and other tenants-and owners in the Project who use the same in common with Tenant, and it shall be the duty of Tenant to keep all the Common Areas free and clear of any obstructions created or permitted by Tenant or resulting from Tenant’s operations. Tenant shall not use the Common Areas or common facilities of the Building or the Project, including the Building’s electrical room, parking lot or trash enclosures, for storage purposes. Nothing herein shall affect the right of Landlord at any time to remove any persons not authorized to use the Common Areas or common facilities from such areas or facilities or to prevent their use by unauthorized persons.

(b) Changes in Common Areas. Landlord reserves the right, at any time and from time to time to (i) make alterations in or additions to the Common Areas or common facilities of the Project, including constructing new buildings or changing the location, size, shape or number of the driveways, entrances, parking spaces, parking areas, loading and unloading areas, landscape areas and walkways, (ii) designate property to be included in or eliminate property from the Common Areas or common facilities of the Project (iii) close temporarily any of the Common Areas or common facilities of the Project for maintenance purposes, and (iv) use the Common Areas and common facilities of the Project while engaged in making alterations in or additions and repairs to the Project; provided, however, that (x) such changes do not materially adversely affect Tenant’s use of the Premises or increase Tenant’s costs hereunder, and (y) reasonable access to the Premises and parking at or near the Project remains available.

(c) Parking. During the Term, Tenant shall have the right to use the number of Parking Spaces specified in Section 1.01(18) for parking on an unassigned basis on that portion of the Project designated by Landlord from time to time for parking. Tenant acknowledges and agrees that the parking spaces in the Project’s parking facility may include a mixture of spaces for compact vehicles as well as full-size passenger automobiles, and that Tenant shall not use parking spaces for vehicles larger than the striped size of the parking spaces. Tenant shall comply with any and all parking rules and regulations if and as from time to time established by Landlord. Tenant shall not allow any vehicles using Tenant’s parking privileges to be parked, loaded or unloaded except in accordance with this Section, including in the areas and in the manner designated by Landlord for such activities. If any vehicle owned or operated by Tenant or any Tenant Parties (as defined in Article Seven) is using the parking or loading areas contrary to any provision of this Section, Landlord shall have the right, in addition to all other rights and remedies of Landlord under this Lease, to remove or tow away the vehicle without prior notice to Tenant, and the cost thereof shall be paid to Landlord within ten (10) business days after notice from Landlord to Tenant.
time to time), or to such other persons, or at such other places or in such manner designated by Landlord, without any prior demand therefor in immediately available funds and without any deduction or offset whatsoever, Rent, including

Rider 2-9
Monthly Base Rent and Rent Adjustments in accordance with Article Four, during the Term. Monthly Base Rent shall be paid monthly in advance on the first day of each month of the Term, except that the first installment of Monthly Base Rent shall be paid by Tenant to Landlord concurrently with execution of this Lease by means of Tenant’s check payable to the order of Metropolitan Life Insurance Company. Monthly Base Rent shall be prorated for partial months within the Term. Unpaid Rent shall bear interest at the Default Rate from the date due until paid. Tenants covenant to pay Rent shall be independent of every other covenant in this Lease. Until further notice to Tenant, Rent paid by wire transfer shall be wired to:

Wells Fargo Bank, San Francisco, CA,
NC # 482-9605856
Routing # 121000248
NC Name: CBRE ITF — Seaport II

ARTICLE FOUR
OPERATING EXPENSES, RENT ADJUSTMENTS AND PAYMENTS

4.01 TENANT’S SHARE OF OPERATING EXPENSES
Tenant shall pay Tenants Share of Operating Expenses in the respective shares of the respective categories of Operating Expenses as set forth below.

(a) Tenant’s Project Share of Project Operating Expenses, which is the percentage obtained by dividing the rentable square footage of the Premises by the rentable square footage of the Project and as of the date hereof equals the percentage set forth in Section 1.01(16);

(b) Tenants Building Share of Building Operating Expenses, which is the percentage obtained by dividing the rentable square footage of the Premises respectively for each building in which the Premises is located by the total rentable square footage of such building and as of the date hereof equals the percentage set forth in Section 1.01(16);

(c) Tenant’s Phase Share of Phase Operating Expenses, which is the percentage obtained by dividing the aggregate rentable square footage of the Premises by the total rentable square footage of Tenant’s Phase and as of the date hereof equals the percentage set forth in Section 1.01(16);

(d) Project Operating Expenses shall mean all Operating Expenses that are not included as Phase Operating Expenses (defined below) and that are not either Building Operating Expenses or operating expenses directly and separately identifiable to the operation, maintenance or repair of any other building located in the Project, but Project Operating Expenses includes operating expenses allocable to any areas of the Building or any other building during such time as such areas are made available by Landlord for the general common use or benefit of all tenants of the Project, and their employees and invitees, or the public, as such areas currently exist and as they may be changed from time to time;

(e) Building Operating Expenses shall mean Operating Expenses that are directly and separately identifiable to each building in which the Premises or part thereof is located;

(f) Phase Operating Expenses shall mean Operating Expenses that Landlord may allocate to a Phase as directly and separately identifiable to all buildings located in the Phase (including but not limited to the Building) and may include Project Operating Expenses that are separately identifiable to a Phase;

(g) Landlord shall have the right to allocate a particular item or portion of Operating Expenses as any one of Project Operating Expenses, Building Operating Expenses or Phase Operating Expenses; however, in no event shall any portion of Building Operating Expenses, Project Operating Expenses or Phase Operating Expenses be assessed or counted against Tenant more than once; and,

(h) Notwithstanding anything to the contrary contained in this Section 4.01, as to each specific category of Operating Expense which one or more tenants of the Building either pays directly to third parties or specifically reimburses to Landlord (for example, separately contracted janitorial services or property taxes directly reimbursed to Landlord), then, on a category by category basis, the amount of Operating Expenses for the affected period shall be adjusted as follows: (1) all such tenant payments with respect to such category of expense and all of Landlord’s costs reimbursed thereby shall be excluded from Operating Expenses and
Tenant’s Building Share, Tenant’s Phase Share or Tenant’s Project Share, as the case may be, for such category of Operating Expense shall be adjusted by excluding the square footage of all such tenants, and (2) if Tenant pays or directly reimburses Landlord for such category of Operating Expense, such category of Operating Expense shall be excluded from the determination of Operating Expenses for the purposes of this Lease.

4.02 RENT ADJUSTMENTS

Tenant shall pay to Landlord Rent Adjustments with respect to each Adjustment Year as follows:

(a) The Rent Adjustment Deposit shall be paid monthly during the Term with the payment of Monthly Base Rent, except the first installment which shall be paid by Tenant to Landlord concurrently with execution of this Lease. The Rent Adjustment Deposit represents, on a monthly basis, Tenant’s Share of Landlord’s estimate of Operating Expenses, as described in Section 4.01, for the applicable Adjustment Year (or portion thereof); and

(b) Any Rent Adjustments due in excess of the Rent Adjustment Deposits in accordance with Section 4.03.

4.03 STATEMENT OF LANDLORD

Within one hundred twenty (120) days after the end of each calendar year or as soon thereafter as reasonably possible, Landlord will furnish Tenant a statement (“Landlord’s Statement”) showing the following:

(a) Operating Expenses for the last Adjustment Year showing in reasonable detail the actual Operating Expenses categorized among Project Operating Expenses, Building Operating Expenses and Phase Operating Expenses for such period and Tenant’s Share of each as described in Section 4.01 above;

(b) The amount of Rent Adjustments due Landlord for the last Adjustment Year, less credit for Rent Adjustment Deposits paid, if any; and

(c) Any change in the Rent Adjustment Deposit due monthly in the current Adjustment Year, including the amount or revised amount due for months preceding any such change pursuant to Landlord’s Statement.

Tenant shall pay to Landlord within ten (10) days after receipt of such statement any amounts for Rent Adjustments then due in accordance with Landlord’s Statement. Any amounts due from Landlord to Tenant pursuant to this Section shall be credited to the Rent Adjustment Deposit next coming due, or refunded to Tenant if the Term has already expired provided Tenant is not in default hereunder. No interest or penalties shall accrue on any amounts which Landlord is obligated to credit or refund to Tenant by reason of this Section 4.03. Landlord’s failure to deliver Landlord’s Statement or to compute the amount of the Rent Adjustments shall not constitute a waiver by Landlord of its right to deliver such items nor constitute a waiver or release of Tenant’s obligations to pay such amounts. The Rent Adjustment Deposit shall be credited against Rent Adjustments due for the applicable Adjustment Year. During the last complete calendar year or during any partial calendar year in which the Lease terminates, Landlord may include in the Rent Adjustment Deposit its estimate of Rent Adjustments which may not be finally determined until after the termination of this Lease. Tenant’s obligation to pay Rent Adjustments survives the expiration or termination of the Lease. Notwithstanding the foregoing, in no event shall the sum of Monthly Base Rent and the Rent Adjustments be less than the Monthly Base Rent payable.

4.04 BOOKS AND RECORDS

Landlord shall maintain books and records showing Operating Expenses and Taxes in accordance with sound accounting and management practices, consistently applied. The Tenant or its representative (which representative shall be a certified public accountant licensed to do
business in the state in which the Property is located and whose primary business is certified public accounting) shall have the right, for a period of thirty (30) days following the date upon which Landlord’s Statement is delivered to Tenant, to examine the Landlord’s books and records with respect to the items in the foregoing statement of Operating Expenses and Taxes during normal business hours, upon written notice, delivered at least three (3) business days in advance. If Tenant does not object in writing to Landlord’s Statement within sixty (60) days of Tenant’s receipt thereof, specifying the nature of the item in dispute and the reasons therefor, then Landlord’s Statement shall be considered final and accepted by Tenant. Any amount due to the Landlord as shown on Landlord’s Statement, whether or not disputed by Tenant as provided herein shall be paid by Tenant when due as provided above, without prejudice to any such written exception.

4.05 TENANT OR LEASE SPECIFIC TAXES

In addition to Monthly Base Rent, Rent Adjustments, Rent Adjustment Deposits and other charges to be paid by Tenant, Tenant shall pay to Landlord, upon demand, any and all taxes payable by Landlord (other than federal or state inheritance, general income, gift or estate taxes) whether or not now customary or within the contemplation of the parties hereto: (a) upon, allocable to, or measured by the Rent payable hereunder, including any gross receipts tax or excise tax levied by any governmental or taxing body with respect to the receipt of such rent; or (b) upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises or any portion thereof; or (c) upon the measured value of Tenant’s personal property or trade fixtures located in the Premises or in any storeroom or any other place in the Premises or the Property, or the areas used in connection with the operation of the Property, it being the intention of Landlord and Tenant that, to the extent possible, Tenant shall cause such taxes on personal property or trade fixtures to be billed to and paid directly by Tenant (d) resulting from Landlord Work, Tenant Work or Tenant Alterations to the Premises, whether title thereto is in Landlord or Tenant, or (e) upon this transaction. Taxes paid by Tenant pursuant to this Section 4.05 shall not be included in any computation of Taxes as part of Operating Expenses.

ARTICLE FIVE
SECURITY

(a) Tenant, at Tenant’s sole cost and expense, concurrently with execution of this Lease, shall either (1) pay Landlord in cash or immediately available funds or (2) provide Landlord the Letter of Credit (defined below) as more particularly described below, in each case in the amount of the Security specified in Section 1.01 as security (“Security”) for the full and faithful performance by Tenant of each and every term, provision, covenant, and condition of this Lease. If Tenant fails timely to perform any of the terms, provisions, covenants and conditions of this Lease or any other document executed by Tenant in connection with this Lease, including, but not limited to, the payment of the Monthly Base Rent, Rent Adjustment Deposits, Rent Adjustments or the repair of damage to the Premises caused by Tenant (excluding normal wear and tear) then Landlord may use, apply, or retain the whole or any part of the Security for the payment of any such Monthly Base Rent, Rent Adjustment Deposits or Rent Adjustments not paid when due, for the cost of repairing such damage, for the cost of cleaning the Premises, for the payment of any other sum which Landlord may expend or may be required to expend by reason of Tenants failure to perform, and otherwise for compensation of Landlord for any other loss or damage to Landlord occasioned by Tenants failure to perform, including, but not limited to, any loss of future Rent and any damage or deficiency in the reletting of the Premises (whether such loss, damages or deficiency accrue before or after summary proceedings or other reentry by Landlord) and the amount of the unpaid past Rent, future Rent loss, and all other losses, costs and damages, that Landlord would be entitled to recover if Landlord were to pursue recovery under California Civil Code Section 1951.2 or 1951.4. If Landlord so uses, applies or retains all or part of the Security, Tenant shall within five (5) business days after demand pay or deliver to Landlord in immediately available funds the sum necessary to replace the amount used, applied or retained, except as specified in (e) below. If Tenant has fully and faithfully performed and observed all of Tenant’s obligations under the terms, provisions, covenants and conditions of this Lease, the Security (except any amount retained for application by Landlord as provided herein) shall be returned or paid over to Tenant no later than ninety (90) days after the latest of (i) the Termination Date; (ii) the removal of Tenant from the Premises; or (iii) the surrender of the Premises by Tenant to Landlord in accordance with this Lease.

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Credit shall have an initial term of no longer than one (1) year, shall be “evergreen”, and shall be extended, reissued
and use the proceeds therefrom (the “Letter of Credit Proceeds”) or any portion thereof in any manner Landlord is
permitted to use the Security under this Article Five. In the event Landlord draws upon the Letter of Credit and elects not to
terminate the Lease, but to use the Letter of Credit Proceeds, then within five (5) business days after Landlord gives Tenant
written notice specifying the amount of the Letter of Credit Proceeds so utilized by Landlord, Tenant shall deliver to Landlord an
amendment to the Letter of Credit or a replacement Letter of Credit in an amount equal to one hundred percent (100%) of the
then-required amount of the Letter of Credit Proceeds so utilized by Landlord, Tenant shall deliver to Landlord an
amendment to the Letter of Credit or a replacement Letter of Credit in an amount equal to one hundred percent (100%) of the
then-required amount of the Letter of Credit. Tenants failure to deliver such amendment or replacement of the Letter of Credit to
Landlord within five (5) business days after Landlord’s notice shall constitute a Default by Tenant under this Lease. The Letter of
Credit and use the proceeds therefrom (the “Letter of Credit Proceeds”) or any portion thereof in any manner Landlord is
permitted to use the Security under this Article Five. In the event Landlord draws upon the Letter of Credit and elects not to
terminate the Lease, but to use the Letter of Credit Proceeds, then within five (5) business days after Landlord gives Tenant
written notice specifying the amount of the Letter of Credit Proceeds so utilized by Landlord, Tenant shall deliver to Landlord an
amendment to the Letter of Credit or a replacement Letter of Credit in an amount equal to one hundred percent (100%) of the
then-required amount of the Letter of Credit. Tenants failure to deliver such amendment or replacement of the Letter of Credit to
Landlord within five (5) business days after Landlord’s notice shall constitute a Default by Tenant under this Lease. The Letter of
Credit shall have an initial term of no longer than one (1) year, shall be “evergreen”, and shall be extended, reissued

(b) The Security, whether in the form of cash, Letter of Credit (defined below) and/or Letter of Credit Proceeds (defined
below), shall not be deemed an advance rent deposit or an advance payment of any kind, or a measure of Landlord’s damages
with respect to Tenant’s failure to perform, nor shall any action or inaction of Landlord with respect to it or its use or application
be a waiver of, or bar or defense to, enforcement of any right or remedy of Landlord. Landlord shall not be required to keep the
Security separate from its general funds and shall not have any fiduciary duties or other duties (except as set forth in this Section) concerning the Security. Tenant shall not be entitled to any interest on the Security. In the event of any sale, lease or
transfer of Landlord’s interest in the Building, Landlord shall have the right to transfer the Security, or balance thereof, to the
vendee, transferee or lessee and any such transfer shall release Landlord from all liability for the return of the Security. Tenant
thereafter shall look solely to such vendee, transferee or lessee for the return or payment of the Security. Tenant shall not assign
or encumber or attempt to assign or encumber the Security or any interest in it and Landlord shall not be bound by any such
assignment, encumbrance, attempted assignment or attempted encumbrance, and regardless of one or more assignments of
this Lease, Landlord may return the Security to the original Tenant without liability to any assignee. Tenant hereby waives any
and all rights of Tenant under the provisions of Section 1950.7 of the California Civil Code, and any and all rights of Tenant
under all other provisions of law, now or hereafter enacted, regarding security deposits.

c) If Tenant fails timely to perform any obligation under this Article Five, such breach shall constitute a Default by Tenant
under this Lease without any right to or requirement of any further notice or cure period under any other Article of this Lease, except such notice and cure period expressly provided under this Article Five.

d) During the first six months after the date on which this Lease has been executed by both Tenant and Landlord, Tenant shall have the right at Tenants sole cost and expense, to provide Landlord with the Letter of Credit (defined below) as the Security required under this Lease in substitution for the cash then held by Landlord as Security. In the event that Tenant first delivered the Security in the form of cash or immediately available funds prior to delivering the Letter of Credit, then, within thirty (30) days after Tenants delivery to Landlord of the Letter of Credit, Landlord shall refund to Tenant the amount of cash held by Landlord as Security, less any amounts thereof used, applied or retained by Landlord pursuant to the provisions of Subsection (a) and not replenished by Tenant

e) As used herein, “Letter of Credit” shall mean an unconditional, irrevocable sight draft letter of credit issued, presentable and payable at the San Francisco, California or San Jose, California office of a major national bank satisfactory to Landlord in its sole discretion (the “Bank”), naming Landlord as beneficiary, in an amount equal to Five Hundred Thousand and 00/100 Dollars ($500,000.00). The Letter of Credit shall provide: (i) that Landlord may make partial and multiple draws thereunder, up to the face amount thereof, and that Landlord may draw upon the Letter of Credit up to the full amount thereof, as determined by Landlord, and the Bank will pay to Landlord the amount of such draw upon receipt by the Bank of a sight draft signed by Landlord without requirement for any additional documents or statements by Landlord; and (ii) that, in the event of assignment or other transfer of either Landlord’s interest in this Lease or of any interest in Landlord (including, without limitation, consolidations, mergers, reorganizations or other entity changes), the Letter of Credit shall be freely transferable by Landlord, without charge to Landlord and without recourse, to the assignee or transferee of such interest and the Bank shall confirm the same to Landlord and such assignee or transferee. The Letter of Credit shall be in the form attached as Exhibit H hereto. Provided however, if Tenant proposes to use Silicon Valley Bank as the issuer of the Letter of Credit, the form of Letter of Credit set forth in Exhibit E hereto will be acceptable to Landlord. Landlord may (but shall not be required to) draw upon the Letter of Credit and use the proceeds therefrom (the “Letter of Credit Proceeds”) or any portion thereof in any manner Landlord is permitted to use the Security under this Article Five. In the event Landlord draws upon the Letter of Credit and elects not to terminate the Lease, but to use the Letter of Credit Proceeds, then within five (5) business days after Landlord gives Tenant written notice specifying the amount of the Letter of Credit Proceeds so utilized by Landlord, Tenant shall deliver to Landlord an amendment to the Letter of Credit or a replacement Letter of Credit in an amount equal to one hundred percent (100%) of the then-required amount of the Letter of Credit. Tenants failure to deliver such amendment or replacement of the Letter of Credit to
Landlord within five (5) business days after Landlord’s notice shall constitute a Default by Tenant under this Lease. The Letter of
Credit shall have an initial term of no longer than one (1) year, shall be “evergreen”, and shall be extended, reissued
or replaced by Tenant, in each case at least thirty (30) days prior to its expiration in a manner that fully complies with the requirements of this Article Five, so that in all events the Letter of Credit required hereunder shall be in full force and effect continuously until the date (the “UC Expiration Date”) for return of the Security described in Subsection (a) above. No more often than once per year, Landlord shall have the right to require Tenant to deliver to Landlord, on 15 days prior notice, a replacement Letter of Credit on the same terms and conditions set forth in this Article Five, in the event that Landlord determines, in its good faith judgment, that the issuing Bank is no longer satisfactory to remain as the issuer of the Letter of Credit. Any advice from the issuer that it intends to withdraw or not extend the Letter of Credit prior to any scheduled annual expiration or the UC Expiration Date shall entitle the Landlord to immediately draw upon the Letter of Credit.

ARTICLE SIX
UTILITIES & SERVICES

6.01 LANDLORD’S GENERAL SERVICES

Landlord shall provide maintenance and services as provided in Article Eight.

6.02 TENANT TO OBTAIN & PAY DIRECTLY

(a) Tenant shall be responsible for and shall pay promptly all charges for gas, electricity, sewer, heat, light, power, telephone, refuse pickup (to be performed on a regularly scheduled basis so that accumulated refuse does not exceed the capacity of Tenant’s refuse bins), janitorial service and all other utilities, materials and services furnished directly to or used by Tenant in, on or about the Premises, together with all taxes thereon. Tenant shall contract directly with the providing companies for such utilities and services.

(b) Notwithstanding any provision of the Lease to the contrary, without, in each instance, the prior written consent of Landlord, as more particularly provided in Article Nine, Tenant shall not: (i) make any alterations or additions to the electric or gas equipment or systems or other Building systems. Tenant’s use of electric current shall at no time exceed the capacity of the wiring, feeders and risers providing electric current to the Premises or the Building. The consent of Landlord to the installation of electric equipment shall not relieve Tenant from the obligation to limit usage of electricity to no more than such capacity.

6.03 TELEPHONE SERVICES

All telegraph, telephone, and communication connections which Tenant may desire outside the Premises shall be subject to Landlord’s prior written approval, in Landlord’s sole discretion, and the location of all wires and the work in connection therewith shall be performed by contractors approved by Landlord and shall be subject to the direction of Landlord, except that such approval is not required as to Tenant’s cabling from the Premises in a route designated by Landlord to any telephone cabinet or panel provided for Tenant’s connection to the telephone cable serving the Building, so long as Tenant’s equipment does not require connections different than or additional to those to the telephone cabinet or panel provided. As to any such connections or work outside the Premises requiring Landlord’s approval, Landlord reserves the right reasonably to approve the entity or entities providing telephone or other communication cable installation, removal, repair and maintenance outside the Premises and reasonably to restrict and control access to telephone cabinets or panels outside the Premises. Tenant shall be responsible for and shall pay all costs incurred in connection with the installation of telephone cables and communication wiring in the Premises, including any hook-up, access and maintenance fees related to the installation of such wires and cables in the Premises and the commencement of service therein, and the maintenance thereafter of such wire and cables; and there shall be included in Operating Expenses for the Building all installation, removal, hook-up or maintenance costs incurred by Landlord in connection with telephone cables and communication wiring serving the Building which are not allocable to any individual users of such service but are allocable to the Building generally. If Tenant fails to maintain all telephone cables and communication wiring in the Premises and such failure affects or interferes with the operation or maintenance of any other telephone cables or communication wiring serving the Building, Landlord or any vendor hired by Landlord may enter into and upon the Premises forthwith and perform such repairs, restorations or alterations as Landlord deems necessary in order to eliminate any such interference (and Landlord may recover from Tenant all of Landlord’s costs in connection therewith). No later than the Termination Date, Tenant agrees to remove all telephone cables and communication wiring installed by Tenant for and during Tenants occupancy, which Landlord shall request Tenant to remove. Tenant agrees that neither Landlord nor any of its agents or employees shall be liable to Tenant, or any of Tenants employees, agents, customers or invitees or anyone claiming through, by or under Tenant, for any damages, injuries, losses, expenses, claims or causes of action because of any
interruption, diminution, delay or discontinuance at any time for any reason in the furnishing of any telephone or other communication service to the Premises and the Building.

6.04 FAILURE OR INTERRUPTION OF UTILITY OR SERVICE

To the extent that any equipment or machinery furnished or maintained by Landlord outside the Premises is used in the delivery of utilities directly obtained by Tenant pursuant to Section 6.02 and breaks down or ceases to function properly, Landlord shall use reasonable diligence to repair same promptly. In the event of any failure, stoppage or interruption of, or change in, any utilities or services supplied by Landlord which are not directly obtained by Tenant, Landlord shall use reasonable diligence to have service promptly resumed. In either event covered by the preceding two sentences, if the cause of any such failure, stoppage or interruption of, or change in, utilities or services is within the control of a public utility, other public or quasi-public entity, or utility provider outside Landlord’s control, notification to such utility or entity of such failure, stoppage or interruption and request to remedy the same shall constitute “reasonable diligence” by Landlord to have service promptly resumed. Notwithstanding any other provision of this Section to the contrary, in the event of any failure, stoppage or interruption of, or change in, any utility or other service furnished to the Premises or the Project resulting from any cause other than the gross negligence or willful and wrongful act of Landlord or its agents or contractors, including changes in service provider or Landlord’s compliance with any voluntary or similar governmental or business guidelines now or hereafter published or any requirements now or hereafter established by any governmental agency, board or bureau having jurisdiction over the operation of the Property (a) Landlord shall not be liable for, and Tenant shall not be entitled to, any abatement or reduction of Rent; (b) no such failure, stoppage, or interruption of any such utility or service shall constitute an eviction of Tenant or relieve Tenant of the obligation to perform any covenant or agreement of this Lease to be performed by Tenant; (c) Landlord shall not be in breach of this Lease nor be liable to Tenant for damages or otherwise.

6.05 INTENTIONALLY OMITTED

6.06 SIGNAGE

Except as set forth in Rider 2, Tenant shall not install any signage within the Project, the Building or the Premises without obtaining the prior written approval of Landlord, and Tenant shall be responsible for procurement, installation, maintenance and removal of any such signage installed by Tenant, and all costs in connection therewith. Any such signage shall comply with Landlord’s current Project signage criteria and all Laws.

ARTICLE SEVEN
POSSESSION, USE AND CONDITION OF PREMISES

7.01 POSSESSION AND USE OF PREMISES

(a) Tenant shall occupy and use the Premises only for the uses specified in Section 1.01(17) to conduct Tenant’s business. Tenant shall not occupy or use the Premises (or permit the use or occupancy of the Premises) for any purpose or in any manner which: (1) is unlawful or in violation of any Law or Environmental Law; (2) may be dangerous to persons or property or which may increase the cost of, or invalidate, any policy of insurance carried on the Building or covering its operations; (3) is contrary to or prohibited by the terms and conditions of this Lease or the rules and regulations as provided in Article Eighteen; (4) contrary to or prohibited by the articles, bylaws or rules of any owner’s association affecting the Project; (5) would obstruct or interfere with the rights of other tenants or occupants of the Building or the Project, or injure or annoy them, or would tend to create or continue a nuisance; or (6) would constitute any waste in or upon the Premises or Project.

(b) Landlord and Tenant acknowledge that the Americans With Disabilities Act of 1990 (42 U.S.C. §12101 et seq.) and regulations and guidelines promulgated thereunder, as all of the same may be amended and supplemented from time to time (collectively referred to herein as the “ADA”) establish requirements for business operations, accessibility and barrier removal, and that such requirements may or may not apply to the Premises, the Building and the Project depending on, among other things: (1) whether Tenant’s business is deemed a “public accommodation” or “commercial facility”, (2) whether such requirements are “readily achievable”, and (3) whether a given alteration affects a “primary function area” or triggers “path of travel” requirements. The parties hereby agree that: (a) Landlord shall be responsible for ADA Title III compliance in the Common Areas, except as provided below, (b) Tenant shall be responsible for ADA Title III compliance in the Premises, including any leasehold improvements or other work to be performed in the Premises under or in connection with this Lease, (c) Landlord may perform, or require that Tenant perform, and Tenant shall be responsible for the cost of, ADA Title III “path of travel” requirements triggered by Tenant Additions in the Premises, and (d) Landlord may perform, or require Tenant to perform,
and Tenant shall be responsible for

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the cost of, ADA Title III compliance in the Common Areas necessitated by the Building being deemed to be a “public accommodation” instead of a “commercial facility” as a result of Tenant’s use of the Premises. Tenant shall be solely responsible for requirements under Title I of the ADA relating to Tenant’s employees.

(c) Landlord and Tenant agree to cooperate and use commercially reasonable efforts to participate in traffic management programs generally applicable to businesses located in or about the area and Tenant shall encourage and support van and car pooling by, and staggered and flexible working hours for, its office workers and service employees to the extent reasonably permitted by the requirements of Tenant’s business. Neither this Section or any other provision of this Lease is intended to or shall create any rights or benefits in any other person, firm, company, governmental entity or the public.

(d) Tenant agrees to cooperate with Landlord and to comply with any and all guidelines or controls concerning energy management imposed upon Landlord by federal or state governmental organizations or by any energy conservation association to which Landlord is a party or which is applicable to the Building.

7.02 HAZARDOUS MATERIAL

(a) Tenant shall not use, generate, manufacture, produce, store, handle, release, discharge, or dispose of, on, under or about the Premises or any part of the Project, or transport to or from the Premises or any part of the Project, any Hazardous Material, or allow its employees, agents, contractors, licensees, invitees or any other person or entity under Tenant’s control (“Tenant Parties”) to do so except to the extent expressly provided below. Provided that the Premises are used only for the uses specified in Section 1.01(17) above, Tenant shall be permitted to use and store in, and transport to and from, the Premises Hazardous Material identified on Exhibit D hereto and by this reference incorporated herein (“Permitted Hazardous Material”) so long as: (i) each item of the Permitted Hazardous Material is used or stored in, or transported to and from, the Premises only to the extent necessary for Tenant’s operation of its business at the Premises; (ii) at no time shall any Permitted Hazardous Material be in use or storage at the Premises in excess of the quantity specified therefor in Exhibit D; (iii) Tenant shall not install any underground tanks of any type; and (iv) the conditions and provisions set forth in this Section 7.02 are complied with. If Tenant desires to add additional types or quantities of Hazardous Materials to the list of Permitted Hazardous Materials specified in Exhibit D Tenant shall give Landlord notice of the Hazardous Materials and quantities thereof that Tenant desires to use at the Premises and Landlord shall thereafter have the right to approve or disapprove such additional Hazardous Materials in Landlord’s sole discretion within ten (10) days after receipt of such notice. Failure to notify Tenant in writing of its decision within said ten (10) day period shall be deemed disapproval by Landlord. Tenant shall comply with and shall cause all Tenant Parties to comply with all Environmental Laws and other Laws pertaining to Tenant’s occupancy and use of the Premises and concerning the proper use, generation, manufacture, production, storage, handling, release, discharge, removal and disposal of any Hazardous Material introduced to the Premises, the Building or the Property by Tenant or any of the Tenant Parties. Without limiting the generality of the foregoing:

(1) Tenant shall provide Landlord promptly with copies of: (x) all permits, licenses and other governmental and regulatory approvals with respect to the use, generation, manufacture, production, storage, handling, release, discharge, removal and disposal by Tenant or any of the Tenant Parties of Hazardous Material at the Project; and (y) each hazardous material management plan or similar document (“Plan(s)”) with respect to use, generation, manufacture, production, storage, handling, release, discharge, removal or disposal of Hazardous Material by Tenant or any of the Tenant Parties necessary to comply with Environmental Laws or other Laws prepared by or on behalf of Tenant or any of the Tenant Parties (whether or not required to be submitted to a governmental agency) and updates thereof in the event of any change in the Permitted Hazardous Materials used by Tenant or when otherwise required by Law.

(2) If Tenant is notified of any investigation or violation of any Environmental Laws or other Laws arising from any activity of Tenant or any of the Tenant Parties at the Property, or if Tenant knows, or has reasonable cause to believe, that a Hazardous Material has come to be located in, on, under or about the Premises or the Project, other than as previously consented to by Landlord, Tenant shall immediately give written notice of such fact to Landlord, and provide Landlord with a copy of all reports, notices, claims or other documentation which it has concerning the presence of such Hazardous Material. In such event Landlord may conduct, at Tenants expense, such tests and studies as Landlord deems desirable relating to compliance by Tenant or any of the
Tenant Parties with this Lease, Environmental Laws, other Laws, or relating to the alleged presence of Hazardous Material introduced to the Premises, the Building or the Property by Tenant or any of the Tenant Parties. Further, Landlord may conduct, at Landlord’s expense, such tests and studies as Landlord deems desirable relating to compliance by Tenant or any of the Tenant Parties with this Lease, Environmental Laws, other Laws, or relating to the alleged presence of Hazardous Material introduced to the Premises, the Building or the Property by Tenant or any of the Tenant Parties. In the event such tests and studies done at Landlord’s expense reasonably indicate that Tenant or Tenant Parties have violated Environmental Laws or caused a release of Hazardous Material, then Tenant shall reimburse Landlord the cost of such tests and studies.

(3) Neither Tenant nor any of the Tenant Parties shall cause or permit any Hazardous Material to be released, discharged or disposed of in, on, under, or about the Premises or the Project (including through the plumbing or sanitary sewer system) and shall promptly, at Tenants expense, take all investigatory and/or remedial action reasonably recommended, whether or not formally ordered or required, for the cleanup of any contamination of, and for the maintenance, security and/or monitoring of the Premises, the Project or neighboring properties, that was caused or materially contributed to by Tenant, or pertaining to or involving any Hazardous Material brought onto the Premises or the Project by Tenant or any of the Tenant Parties.

(4) Tenant shall, no later than the Termination Date, surrender the Premises to Landlord free of Hazardous Material and with all remedial and/or closure plans completed (and deliver evidence thereof to Landlord).

(b) To the extent permitted by law, Tenant hereby indemnifies and agrees to protect, defend and hold the Indemnitees harmless against all actions, claims, demands, liability, costs and expenses, including reasonable attorneys’ fees and expenses for the defense thereof, arising from the use, generation, manufacture, production, storage, handling, release, threatened release, discharge, disposal, transportation to or from, or presence of any Hazardous Material on, under or about the Premises or any part of the Project caused by Tenant or by any of the Tenant Parties, whether before, during or after the Term. Tenant’s obligations under this Section 7.02 shall survive the expiration or earlier termination of this Lease. In case of any action or proceeding brought against the Indemnitees by reason of any such claim, upon notice from Landlord, Tenant covenants to defend such action or Proceeding by counsel chosen by Landlord, in Landlord’s sole discretion. Landlord reserves the right to settle, compromise or dispose of any and all actions, claims and demands related to the foregoing indemnity, subject to the prior written approval of Tenant, which may not unreasonably be withheld.

(c) The right to use and store in, and transport to and from, the Premises the Permitted Hazardous Material is personal to Genomic Health and may not be assigned or otherwise transferred by it without the prior written consent of Landlord, which consent may be withheld in Landlord’s sole discretion, except (i) to a Permitted Transferee which is an assignee of the Lease and which has satisfied the requirements of Sections 10.01 and 10.05 of this Lease; and (ii) Genomic Health may permit a Permitted Transferee which is a sublessee to use and store in, and transport to and from, the Premises the Permitted Hazardous Material to the same extent as Genomic Health has such right under this Lease, subject to all the provisions of this Lease. Any consent by Landlord pursuant to Article Ten to an assignment, transfer, subletting, mortgage, pledge, hypothecation or encumbrance of this Lease, and any interest therein or right or privilege appurtenant thereto, shall not constitute consent by Landlord to the use or storage at, or transportation to, the Premises of any Hazardous Material (including a Permitted Hazardous Material) by any such assignee, sublessee or transferee unless Landlord expressly agrees otherwise in writing. Provided however, at the time Tenant requests approval of any proposed assignment or sublease of this Lease by Tenant, Tenant shall submit to Landlord the proposed Permitted Hazardous Material list of the proposed assignee or sublessee. Landlord shall have the right, in its sole discretion, to approve the proposed assignee’s or sublessee’s proposed Permitted Hazardous Material list, or to require modifications to said list. In the event that Landlord does not approve of the proposed assignee’s or sublessee’s Permitted Hazardous Material list, or the proposed assignee or sublessee cannot or will not modify said list, then it shall be reasonable for purposes of Article Ten hereof for Landlord to refuse its consent to the proposed assignee or sublessee. In the event that the proposed Hazardous Material list of the assignee or sublessee includes any Hazardous Material different from or in greater quantity than those on Tenants Permitted Hazardous Material list, Tenant shall pay Landlord, whether or not Landlord consents to the proposed list of Permitted Hazardous Materials and/or to the proposed assignment or sublease, (i) a processing fee of Three Thousand Dollars ($3,000.00) at the time Tenant submits the request for approval, and (ii)
the reasonable fees and expenses of any consultants retained by Landlord in connection with review of the proposed Permitted Hazardous Material list and use thereof by the proposed assignee or sublessee. Any consent by Landlord to the use or storage at, or transportation to or from the Premises, of any Hazardous Material (including a Permitted Hazardous Material) by an assignee, sublessee or transferee of Tenant shall not constitute a waiver of Landlord’s right to refuse such consent as to any subsequent assignee or transferee.

(d) Tenant acknowledges that the sewer piping at the Project is made of ABS plastic. Accordingly, without Landlord’s prior written consent, which may be given or withheld in Landlord’s sole discretion, only ordinary domestic sewage is permitted to be put into the drains at the Premises. UNDER NO CIRCUMSTANCES SHALL Tenant EVER DEPOSIT ANY ESTERS OR KETONES (USUALLY FOUND IN SOLVENTS TO CLEAN UP PETROLEUM PRODUCTS) IN THE DRAINS AT THE PREMISES. If Tenant desires to put any substances other than ordinary domestic sewage into the drains, it shall first submit to Landlord a complete description of each such substance, including its chemical composition, and a sample of such substance suitable for laboratory testing. Landlord shall promptly determine whether or not the substance can be deposited into the drains and its determination shall be absolutely binding on Tenant. Upon demand, Tenant shall reimburse Landlord for expenses incurred by Landlord in making such determination. If any substances not so approved hereunder are deposited in the drains in Tenant’s Premises, Tenant shall be liable to Landlord for all damages resulting therefrom, including but not limited to all costs and expenses incurred by Landlord in repairing or replacing the piping so damaged.

7.03 LANDLORD ACCESS TO PREMISES; APPROVALS

(a) Tenant shall permit Landlord to erect, use and maintain pipes, ducts, wiring and conduits in and through the Premises, so long as Tenant’s use, layout or design of the Premises is not materially affected or altered. Landlord or Landlord’s agents shall have the right to enter upon the Premises (i) in the event of an emergency, without prior notice, or (ii) with 24-hour prior notice to inspect the Premises, to perform janitorial and other services (if any), to conduct safety and other testing in the Premises and to make such repairs, alterations, improvements or additions to the Premises or the Building or other parts of the Property as Landlord may deem necessary or desirable (including all alterations, improvements and additions in connection with a change in service provider or providers). Janitorial and cleaning services (if any) shall be performed after normal business hours. Any entry or work by Landlord may be during normal business hours and Landlord may use reasonable efforts to ensure that any entry or work shall not materially interfere with Tenant’s occupancy of the Premises.

(b) If Tenant or its agents shall not be personally present to permit an entry into the Premises when for any reason an entry therein shall be necessary or permissible, Landlord (or Landlord’s agents), after having properly notified Tenant (unless Landlord believes an emergency situation exists), may enter the Premises without rendering Landlord or its agents liable therefor, and without relieving Tenant of any obligations under this Lease.

(c) Landlord may enter the Premises for the purpose of conducting such inspections, tests and studies as Landlord may deem desirable or necessary to confirm Tenant’s compliance with all Laws and Environmental Laws or for other purposes necessary in Landlord’s reasonable judgment to ensure the sound condition of the Property and the systems serving the Property. Landlord’s rights under this Section 7.03 (c) are for Landlord’s own protection only, and Landlord has not, and shall not be deemed to have assumed, any responsibility to Tenant or any other party as a result of the exercise or non-exercise of such rights, for compliance with Laws or Environmental Laws or for the accuracy or sufficiency of any item or the quality or suitability of any item for its intended use.

(d) Landlord may do any of the foregoing, or undertake any of the inspection or work described in the preceding paragraphs without such action constituting an actual or constructive eviction of Tenant, in whole or in part, or giving rise to an abatement of Rent by reason of loss or interruption of business of the Tenant, or otherwise.

(e) The review, approval or consent of Landlord with respect to any item required or permitted under this Lease is for Landlord’s own protection only, and Landlord has not, and shall not be deemed to have assumed, any responsibility to Tenant or any other party, as a result of the exercise or non-exercise of such rights, for compliance with Laws or Environmental Laws or for the accuracy or sufficiency of any item or the quality or suitability of any item for its intended use.

7.04 QUIET ENJOYMENT
Landlord covenants, in lieu of any implied covenant of quiet possession or quiet enjoyment, that so long as Tenant is in compliance with the covenants and conditions set forth in this Lease, Tenant shall have the right to quiet enjoyment of the Premises without hindrance or interference from Landlord or those claiming through Landlord, and subject to the covenants and conditions set forth in the Lease and to the rights of any Mortgagee or ground lessor.

ARTICLE EIGHT
MAINTENANCE & HVAC

8.01 LANDLORD’S MAINTENANCE

Subject to Article Fourteen and Section 8.02, Landlord shall maintain the structural portions of the Building, the roof, exterior walls and exterior doors, foundation, and underslab standard sewer system of the Building in good, clean and safe condition. Notwithstanding the foregoing, Landlord shall have no responsibility to perform preventive maintenance or service for, or to repair any heating, ventilation and air conditioning equipment and systems serving the Premises (“HVAC”), and all such preventive maintenance, service, and repairs shall be performed by Tenant pursuant to the terms of Section 8.02. Landlord shall also (a) maintain the landscaping, parking facilities and other Common Areas of the Project, and (b) wash the outside of exterior windows at intervals determined by Landlord. Except as provided in Article Fourteen and Article Fifteen, there shall be no abatement of rent, no allowance to Tenant for diminution of rental value and no liability of Landlord by reason of inconvenience, annoyance or any injury to or interference with Tenant’s business arising from the making of or the failure to make any repairs, alterations or improvements in or to any portion of the Project or in or to any fixtures, appurtenances or equipment therein. Tenant waives the right to make repairs at Landlord’s expense under any law, statute or ordinance now or hereafter in effect.

8.02 TENANTS MAINTENANCE

(a) Subject to the provisions of Article Fourteen, Tenant shall, at Tenant’s sole cost and expense, maintain and make all repairs to the Premises and fixtures therein which Landlord is not required to make pursuant to Section 8.01, including repairs to the interior walls, ceilings and windows of the Premises, the interior doors, Tenants signage, and the electrical, life-safety, plumbing and HVAC, and shall maintain the Premises, the fixtures, HVAC and utilities systems therein, and the area immediately surrounding the Premises (including all garbage enclosures), in a good, clean and safe condition. Tenant shall deliver to Landlord a copy of any maintenance contract entered into by Tenant with respect to the Premises. Tenant shall also, at Tenant’s expense, keep any non-standard heating, ventilating and air conditioning equipment and other non-standard equipment in the Building in good condition and repair, using contractors approved in advance, in writing, by Landlord, which approval shall not be unreasonably withheld. Notwithstanding Section 8.01 above, to the extent that Landlord is not reimbursed by insurance and no waiver set forth in Section 16.04 is applicable, Tenant will pay for any repairs to the Building or the Project which are caused by any negligence or willful and wrongful act of Tenant or its assignees, subtenants or employees, or of the respective agents of any of the foregoing persons, or of any other persons permitted in the Building or elsewhere in the Project by Tenant or any of them. Tenant will maintain the Premises, and will leave the Premises upon termination of this Lease, in a safe, clean, neat and sanitary condition.

(b) With respect to HVAC, Tenant, at Tenants sole cost and expense, shall enter into contracts (“HVAC Service Contracts”) for regularly scheduled inspections and preventive maintenance and service, as to which the contractors, scope of work, frequency of inspection, maintenance or service, shall be subject to Landlord’s prior written approval, in its sole discretion. Tenant shall cause the contractor for such HVAC Service Contracts to deliver written reports to Landlord within ten (10) days after the date of such inspection, maintenance and/or service. Tenant shall deliver to Landlord a copy of the initial HVAC Service Contracts within sixty (60) days after the Initial Premises Commencement Date and of subsequent HVAC Service Contracts entered into by Tenant within ten (10) days after execution thereof (which subsequent HVAC Service Contracts shall be subject to the same approval standards and requirements as set forth above with respect to the initial contract). In the event Tenant fails, in the reasonable judgment of Landlord, to meet the requirements for such HVAC Service Contracts and cause such inspections, maintenance and service to be performed, which failure continues at the end of fifteen (15) days following written notice given by Landlord stating the nature of the failure, Landlord shall have the right (but shall not be obligated) to obtain such HVAC Service Contracts and to enter the Premises and perform such inspection, maintenance and service, at Tenant’s sole cost and expense; provided, however, if the nature of the maintenance or repair is such that it cannot, with the exercise of reasonable diligence, be completed within fifteen (15) days of Tenant’s receipt of Landlord’s notice, Landlord shall not undertake such inspection, maintenance
and service at Tenant’s expense provided Tenant commences such inspection, maintenance and service in the manner required above within said 15-day period and thereafter diligently and continuously prosecutes the same to completion and provided further, however, that in the event of an emergency condition, Landlord shall have the right to make such inspection, maintenance, service and/or repairs on behalf of Tenant at Tenant’s sole cost and expense after giving Tenant such notice, if any, as is reasonable under the circumstances. Landlord’s right of entry pursuant to Section 7.03 shall include the right to enter and inspect the Premises for violations of Tenant’s covenants herein. Tenant shall maintain written records of HVAC inspection, maintenance, service repairs, and shall use certified technicians approved in writing by Landlord to perform such maintenance and repairs.

8.03 ADDITIONAL PROVISIONS REGARDING HVAC

Over a period of three years after the Initial Premises Commencement Date, Tenant shall, subject to reimbursement by Landlord on the schedule provided below, replace 150 tons of non-specialized HVAC units serving the Building with new equipment of like kind and quality as the existing equipment (which includes mechanical units, associated controls and ductwork, and related materials and expenses). Tenant shall pay the cost thereof, subject to reimbursement by Landlord on the schedule provided below, which reimbursed amounts shall not be recoverable by Landlord from Tenant as items of Building Operating Expenses. Tenant shall control the work and schedule for the replacement of the 150 tons of HVAC, subject to the requirements set forth herein and Landlord’s prior written approval, which shall not be unreasonably withheld, of the following: (a) the vendors and contractors to supply and install such HVAC, and Landlord and Tenant agree that Tenant shall obtain bids from a minimum of three such vendors and contractors; (b) all plans and specifications of and for such HVAC and installation thereof, but Landlord and Tenant agree that the cost reimbursable to Tenant by Landlord hereunder shall in no event exceed the amount of lowest bid; (d) the contracts for such HVAC and installation thereof, and Landlord and Tenant agree that, among other things, such contracts shall provide for warranties acceptable to Landlord and that such warranties shall name Landlord and be issued directly for the benefit of and enforceable by Landlord. Tenant shall provide a replacement schedule to Landlord. Notwithstanding the foregoing, in the event Tenant, in its reasonable opinion, determines that it is most efficient or cost-effective to replace 150 tons of HVAC at the time that Tenant conducts the Tenant Work pursuant to the Workletter, then Tenant may do so. The replacement costs shall be reimbursed to Tenant by Landlord over a three year period on each of the subsequent three (3) anniversaries of the date upon which the replacement work was completed (or first portion thereof was completed, if Tenant elects not to replace all 150 tons at once). Each annual payment shall be an amount equal to the lesser of (x) the amount actually expended by Tenant for work done (to the extent not previously reimbursed) and (y) one-third (1/3) of the total cost of ‘replacement of all 150 tons, as approved and permitted by this Section; provided however, any amount reimbursable to Tenant hereunder shall, if ‘not previously reimbursed, be reimbursed to Tenant no later than the third (3rd) anniversary of the Initial Premises Commencement Date. Provided further, at least thirty (30) days prior to any reimbursement, Tenant shall provide Landlord, with respect to the work for which reimbursement is sought (i) a reasonable description of the work, including names of all contractors, subcontractors and vendors providing labor, services or material; CO bills and invoices, and proof of payment thereof by Tenant; (iii) valid, unconditional mechanics’ lien releases; (iv) applicable warranties; and (v) “As Built” drawings and specifications in the same form as those required under Section 3.5 of the Workletter.

In no event shall any portion of Tenants Allowance (as defined in the Workletter) be allocated toward the cost of the replacement of the 150 tons of HVAC, or the ancillary mechanical units, associated controls and ductwork, and related materials and expenses. Upon installation, such HVAC shall be deemed to be part of the Building and owned by Landlord.

ARTICLE NINE
ALTERATIONS AND IMPROVEMENTS

9.01 TENANT ALTERATIONS

(a) The following provisions shall apply to the completion of any Tenant Alterations:

   (1) Tenant shall not, except as provided herein, without the prior written consent of Landlord, which consent shall not be unreasonably withheld, make or cause to be made any Tenant Alterations in or to the Premises or any Property systems serving the Premises. Prior to making any Tenant Alterations, Tenant shall give Landlord ten (10) days prior written notice (or such earlier notice as would be necessary pursuant to applicable Law) to permit Landlord sufficient time to post appropriate notices of non-responsibility. Subject to all other requirements of this Article Nine, Tenant may,
without Landlord’s prior written consent, undertake (i) Decoration work and/or (ii) any Alterations that (x) do not adversely affect the roof, structural portions or the systems or equipment of the Building, (y) are not visible from the exterior of the Building, and (z) do not cost, in the aggregate, over the Term of the Lease, in excess of $50,000. Tenant shall furnish Landlord with the names and addresses of all contractors and subcontractors and copies of all contracts. All Tenant Alterations shall be completed at such time and in such manner as Landlord may from time to time designate, and only by contractors or mechanics approved by Landlord, which approval shall not be unreasonably withheld. The contractors, mechanics and engineers who may be used are further limited to those whose work will not cause or threaten to cause disharmony or interference with Landlord or other tenants in the Building and their respective agents and contractors performing work in or about the Building. Landlord may further condition its consent upon Tenant furnishing to Landlord and Landlord approving prior to the commencement of any work or delivery of materials to the Premises related to the Tenant Alterations such of the following as specified by Landlord: architectural plans and specifications, opinions from Landlord's engineers stating that the Tenant Alterations will not in any way adversely affect the Building's systems, necessary permits and licenses, certificates of insurance, and such other documents in such form reasonably requested by Landlord. Landlord may, in the exercise of reasonable judgment, request that Tenant provide Landlord with appropriate evidence of Tenant's ability to complete and pay for the completion of the Tenant Alterations such as a performance bond or letter of credit. Upon completion of the Tenant Alterations, Tenant shall deliver to Landlord an as-built mylar and digitized (if available) set of plans and specifications for the Tenant Alterations.

(2) Tenant shall pay the cost of all Tenant Alterations and the cost of decorating the Premises and any work to the Property occasioned thereby. In connection with completion of any Tenant Alterations, Tenant shall, upon receipt of Landlord’s itemized invoice therefor, pay Landlord’s actual and reasonable costs to review the plans and specifications for such Tenant Alterations and to monitor the performance thereof, including a construction administration fee and all elevator and hoisting charges at Landlord’s then standard rate. Upon completion of Tenant Alterations, Tenant shall furnish Landlord with contractors’ affidavits and full and final waivers of lien and receipted bills covering all labor and materials expended and used in connection therewith and such other documentation reasonably requested by Landlord or Mortgagee.

(3) Tenant agrees to complete all Tenant Alterations (i) in accordance with all Laws, Environmental Laws, all requirements of applicable insurance companies and in accordance with Landlord’s standard construction rules and regulations, and (ii) in a good and workmanlike manner with the use of good grades of materials. Tenant shall notify Landlord immediately if Tenant receives any notice of violation of any Law in connection with completion of any Tenant Alterations and shall immediately take such steps as are necessary to remedy such violation. In no event shall such supervision or right to supervise by Landlord nor shall any approvals given by Landlord under this Lease constitute any warranty by Landlord to Tenant of the adequacy of the design, workmanship or quality of such work or materials for Tenant’s intended use or of compliance with the requirements of Section 9.01(a)(3)(1) and (ii) above or impose any liability upon Landlord in connection with the performance of such work.

(b) All Tenant Additions to the Premises whether installed by Landlord or Tenant, shall without compensation or credit to Tenant, become part of the Premises and the property of Landlord at the time of their installation and shall remain in the Premises, unless pursuant to Article Twelve, Tenant may remove them or is required to remove them at Landlord’s request. Tenant’s Personal Property, as set forth in Exhibit G, shall at all times remain the property of Tenant and Tenant shall remove such property at the expiration or earlier termination of this Lease.

9.02 LIENS

Tenant shall not permit any lien or claim for lien of any mechanic, laborer or supplier or any other lien to be filed against the Building, the Land, the Premises, or any other part of the Property arising out of work performed, or alleged to have been performed by, or at the direction of, or on behalf of Tenant. If any such lien or claim for lien is filed, Tenant shall within ten (10) days of receiving notice of such lien or claim (a) have such lien or claim for lien released of record or (b) deliver to Landlord a bond in form, content, amount, and issued by surety, satisfactory to Landlord, indemnifying, protecting, defending and holding harmless the Indemnities against all costs and liabilities resulting from such lien or claim for lien and the
foreclosure or attempted foreclosure thereof. If Tenant fails to take any of the above actions, Landlord, in addition to its rights and remedies under Article Eleven, without investigating the validity of such lien or claim for lien, may pay or discharge the same and Tenant shall, as payment of additional Rent hereunder, reimburse Landlord upon demand for the amount so paid by Landlord, including Landlord’s expenses and reasonable attorneys’ fees.

ARTICLE TEN
ASSIGNMENT AND SUBLETTING

10.01 ASSIGNMENT AND SUBLETTING

(a) Without the prior written consent of Landlord, which may be withheld in Landlord’s sole discretion, Tenant may not sublease, assign, mortgage, pledge, hypothecate or otherwise transfer or permit the transfer of this Lease or the encumbering of Tenants interest therein in whole or in part, by operation of Law or otherwise or permit the use or occupancy of the Premises, or any part thereof, by anyone other than Tenant, provided, however, if Landlord chooses not to recapture the space proposed to be subleased or assigned as provided in Section 10.02, Landlord shall not unreasonably withhold its consent to a subletting or assignment under this Section 10.01. Tenant agrees that the provisions governing sublease and assignment set forth in this Article Ten shall be deemed to be reasonable. If Tenant desires to enter into any sublease of the Premises or assignment of this Lease, Tenant shall deliver written notice thereof to Landlord (“Tenant's Notice”), together with the identity of the proposed subtenant or assignee and the proposed principal terms thereof and financial and other information sufficient for Landlord to make an informed judgment with respect to such proposed subtenant or assignee at least sixty (60) days prior to the commencement date of the term of the proposed sublease or assignment If Tenant proposes to sublease less than all of the Rentable Area of the Premises, the space proposed to be sublet and the space retained by Tenant must each be a marketable unit as reasonably determined by Landlord and otherwise in compliance with all Laws; provided however, so long as the Tenant is Genomic Health or a Permitted Transferee which is an assignee of the Lease which has satisfied the requirements of Sections 10.01 and 10.05 below, the foregoing shall not apply to a sublease for a sublease term of a year or less, for undemised space in the aggregate (for one or more such subleases in effect at any one time) up to 3,000 square feet of Rentable Area. Landlord shall notify Tenant in writing of its approval or disapproval of the proposed sublease or assignment or its decision to exercise its rights under Section 10.02 within thirty (30) days after receipt of Tenant’s Notice (and all required information). In no event may Tenant sublease any portion of the Premises or assign the Lease to any other tenant of the Project. Tenant shall submit for Landlord’s approval (which approval shall not be unreasonably withheld) any advertising which Tenant or its agents intend to use with respect to the space proposed to be sublet.

(b) With respect to Landlord’s consent to an assignment or sublease, Landlord may take into consideration any factors which Landlord may deem relevant, and the reasons for which Landlord’s denial shall be deemed to be reasonable shall include, without limitation, the following:

(i) the business reputation or creditworthiness of any proposed subtenant or assignee is not acceptable to Landlord; or

(ii) in Landlord's reasonable judgment the proposed assignee or subtenant would diminish the value or reputation of the Building or Landlord; or

(iii) any proposed assignee’s or subtenant’s use of the Premises would violate Section 7.01 of the Lease or would violate the provisions of any other leases of tenants in the Project;

(iv) the proposed assignee or subtenant is either a governmental agency, a school or similar operation, or a medical related practice; or

(v) the proposed subtenant or assignee is a bona fide prospective tenant of Landlord in the Project as demonstrated by a written proposal dated within ninety (90) days prior to the date of Tenant’s request; or

(vi) the proposed subtenant or assignee would materially increase the estimated pedestrian and vehicular traffic to and from the Premises and the Building.

In no event shall Landlord be obligated to consider a consent to any proposed assignment of the Lease which would assign less than the entire Premises. In the event Landlord wrongfully
withholds its consent to any proposed sublease of the Premises or assignment of the Lease, Tenant’s sole and exclusive remedy therefor shall be to seek specific performance of Landlord’s obligations to consent to such sublease or assignment.

(c) Any sublease or assignment shall be expressly subject to the terms and conditions of this Lease. Any subtenant or assignee shall execute such documents as Landlord may reasonably require to evidence such subtenant or assignee’s assumption of the obligations and liabilities of Tenant under this Lease. Tenant shall deliver to Landlord a copy of all agreements executed by Tenant and the proposed subtenant and assignee with respect to the Premises. Landlord’s approval of a sublease, assignment, hypothecation, transfer or third party use or occupancy shall not constitute a waiver of Tenant’s obligation to obtain Landlord’s consent to further assignments or subleases, hypothecations, transfers or third party use or occupancy.

(d) For purposes of this Article Ten, an assignment shall be deemed to include a change in the majority control of Tenant, resulting from any transfer, sale or assignment of shares of stock or membership interests of Tenant occurring by operation of Law or otherwise, and includes any merger, acquisition, consolidation or reorganization, except as otherwise provided in this Subsection below. Notwithstanding any provision of this Section to the contrary, an assignment for purposes of this Article does not include any transfer of control of the stock or membership interests of Tenant through (i) any public offering of shares of stock in Tenant in accordance with applicable State and Federal law, rules, regulations and orders if thereafter the stock shall be listed and publicly traded through the New York Stock Exchange or the NASDAQ national market; or (ii) public sale of such stock effected through such Exchange or the NASDAQ national market. If Tenant is a partnership, any change in the partners of Tenant shall be deemed to be an assignment.

(e) For purposes of this Lease, a “Permitted Transferee” shall mean any Person which: (i) is an Affiliate of Tenant; or (ii) is the corporation or other entity (the “Successor”) resulting from a merger, conversion, consolidation or non-bankruptcy reorganization of Tenant or (iii) is not a Successor but is otherwise a deemed assignee due to a change of control under section 10.01(d) above; or (iv) purchases, leases or acquires by way of exchange all or substantially all the assets of Tenant as a going concern (the “Purchaser”). Notwithstanding anything to the contrary in Sections 10.01(a) and (b), 10.02 and 10.03, provided there is no uncured Default under this Lease, Tenant shall have the right, without the prior written consent of Landlord, to assign this Lease to a Permitted Transferee or to sublease the Premises or any part thereof to a Permitted Transferee provided that: (1) Landlord receives thirty (30) days prior written notice of an assignment or sublease (including a pending transaction described in subparts (i), (ii), (iii) or (iv) of this Section 10.01(e)); provided that Tenant may give notice in less than thirty (30) days in connection with a pending transaction described in subparts (ii) and (iv) of this Section 10.01(e) to the extent that Tenant is precluded, by the terms of the transaction or, if Tenant’s stock is publicly traded, by applicable securities’ laws, from making disclosure of the transaction itself; (2) with respect to an assignment of the Lease or a sublease of more than half the Premises to an entity described in subparts (ii) or (iv) of this Section 10.01(e), the Permitted Transferee’s net worth is not less than Tenant’s net worth (measured as of the most recent date for which financial statements prepared in accordance with GAAP are available); (3) with respect to an assignment of the Lease or a sublease of more than half the Premises to an entity described in subparts (i) or (iii) of this Section 10.01(e), Tenant (as the assignor or sublandlord) continues in existence with a net worth not less than Tenant’s net worth immediately prior to such assignment or subletting; (4) the Permitted Transferee expressly assumes (except a Permitted Transferee which is a deemed assignee under subpart (iii) of this Section 10.01(e) or which is a sublessee in the event of a sublease under this Section 10.01(e)) in writing reasonably satisfactory to Landlord all of the obligations of Tenant under this Lease and delivers such assumption to Landlord no later than fifteen (15) days (or such lesser time as is appropriate in connection with a pending transaction described in subparts (ii) and (iv) of this Section 10.01(e) to the extent that Tenant is precluded, by the terms of the transaction or, if Tenant’s stock is publicly traded, by applicable securities’ laws, from making disclosure of the transaction itself) prior to the effective date of the assignment; (5) Landlord receives no later than five (5) days before the effective date a fully executed copy of the applicable assignment or sublease agreement between Tenant and the Permitted Transferee; and (6) promptly after Landlord’s written request, Tenant and the Permitted Transferee provide such reasonable documents and information which Landlord reasonably requests for the purpose of substantiating whether or not the assignment or sublease is to a Permitted Transferee. All determinations of net worth for purposes of this Subsection shall exclude any value attributable to goodwill or going concern value. With respect to any proposed assignment under subparts (ii)
or (iv) of this Section 10.01(e), Tenant shall pay Landlord, no later than fifteen (15) days prior to the effective date of such proposed assignment or sublease, a processing fee of Three Thousand Dollars ($3,000.00), which shall be Landlord’s earned fee whether or not the proposed assignment or sublease is completed by Tenant.

(f) With respect to any sublease to a Permitted Transferee pursuant to Subsection (e) above, Tenant hereby irrevocably assigns to Landlord, effective upon any such sublease, all rent and other payments due from subtenant under the sublease, provided however, that Tenant shall have a license to collect such rent and other payments until the occurrence of a default by Tenant under any of the provisions of the Lease, and notice to Tenant of such default shall not be a prerequisite to Landlord’s right to collect subrent. At any time at Landlord’s option, Landlord shall have the right to give notice to the subtenant of such assignment. Landlord shall credit Tenant with any rent received by Landlord under such assignment but the acceptance of any payment on account of rent from the subtenant as the result of any such default shall in no manner whatsoever serve to release Tenant from any liability under the terms, covenants, conditions, provisions or agreement under the Lease. No such payment of rent or any other payment by the subtenant directly to Landlord and/or acceptance of such payment(s) by Landlord, regardless of the circumstances or reasons therefor, shall in any manner whatsoever be deemed an attornment by the subtenant to Landlord in the absence of a specific written agreement signed by Landlord to such an effect. For purposes of this Subsection, any use or occupancy by a Permitted Transferee (unless it is an assignee) without a formal sublease shall for the purposes of this Subsection be deemed to be a sublease at the same rental rate as provided in the Lease.

10.02 RECAPTURE

Landlord shall have the option to exclude from the Premises covered by this Lease (“recapture”), the space proposed to be sublet or subject to the assignment, so long as (i) the proposed transfer is not to a Permitted Transferee in accordance with the provisions of Section 10.01(e), and (ii) the proposed sublease is for the remainder of the term of this Lease and Landlord recaptures the entire portion of the Premises subject to the proposed sublease. If Landlord elects to recapture, such recapture shall be effective as of the commencement date of such sublease or assignment, Tenant shall surrender possession of the space proposed to be subleased or subject to the assignment to Landlord on the effective date of recapture of such space from the Premises, such date being the Termination Date for such space. Effective as of the date of recapture of any portion of the Premises pursuant to this section, the Monthly Base Rent, Rentable Area of the Premises and Tenant’s Share shall be adjusted accordingly.

10.03 EXCESS RENT

Except with respect to an assignment or sublease to a Permitted Transferee in accordance with the provisions of Section 10.01(e), Tenant shall pay Landlord on the first day of each month during the term of the sublease or assignment, fifty percent (50%) of the amount by which the sum of all rent and other consideration (direct or indirect) due from the subtenant or assignee for such month exceeds: (i) that portion of the Monthly Base Rent and Rent Adjustments due under this Lease for said month which is allocable to the space sublet or assigned; and (ii) the following costs and expenses for the subletting or assignment of such space: (1) brokerage commissions and reasonable attorneys’ fees and expenses, (2) the actual costs paid in making any improvements or substitutions in the Premises required by any sublease or assignment; and (3) “free rent” periods, costs of any inducements or concessions given to subtenant or assignee, moving costs, and other amounts in respect of such subtenant’s or assignee’s other leases or occupancy arrangements. All such costs and expenses shall be amortized over the term of the sublease or assignment pursuant to sound accounting principles.

10.04 TENANT LIABILITY

In the event of any sublease or assignment, whether or not with Landlord’s consent, Tenant shall not be released or discharged from any liability, whether past, present or future, under this Lease, including any liability arising from the exercise of any renewal or expansion option, to the extent such exercise is expressly permitted by Landlord. Tenants liability shall remain primary, and in the event of default by any subtenant, assignee or successor of Tenant in performance or observance of any of the covenants or conditions of this Lease, Landlord may proceed directly against Tenant without the necessity of exhausting remedies against said subtenant, assignee or successor. After any assignment, Landlord may consent to subsequent assignments or subletting of this Lease, or amendments or modifications of this Lease with assignees of Tenant, without notifying Tenant, or any successor of Tenant, and without obtaining its or their consent thereto, and such action shall not relieve Tenant or any successor of Tenant of liability under this Lease. If Landlord grants consent to such sublease or assignment Tenant shall pay all reasonable attorneys’ fees and expenses incurred by Landlord with respect to such assignment.
or sublease. In addition, if Tenant has any options to extend the term of this Lease or to add other space to the Premises, such options shall not be available to any subtenant or assignee, directly or indirectly without Landlord’s express written consent, which may be withheld in Landlord’s sole discretion.

10.05 ASSUMPTION AND ATTORNMENT

If Tenant shall assign this Lease as permitted herein, the assignee shall expressly assume all of the obligations of Tenant hereunder in a written instrument satisfactory to Landlord and furnished to Landlord not later than fifteen (15) days prior to the effective date of the assignment. If Tenant shall sublease the Premises as permitted herein, Tenant shall, at Landlord’s option, within fifteen (15) days following any request by Landlord, obtain and furnish to Landlord the written agreement of such subtenant to the effect that the subtenant will attorn to Landlord and will pay all subrent directly to Landlord.

ARTICLE ELEVEN
DEFAULT AND REMEDIES

11.01 EVENTS OF DEFAULT

The occurrence or existence of any one or more of the following shall constitute a material default and breach of the Lease (a “Default”) by Tenant under this Lease:

   (i) Tenant fails to pay any installment or other payment of Rent, including Rent Adjustment Deposits or Rent Adjustments, within three business (3) days after written notice to Tenant of such failure to pay, provided that after Landlord has twice sent such notice to Tenant for failure to pay, thereafter such failure shall be a Default if Tenant fails to pay any such installment or other payment of Rent, including Rent Adjustment Deposits or Rent Adjustments, within three (3) business days after the date when the same are due;

   (ii) Tenant fails to observe or perform any of the other covenants, conditions or provisions of this Lease or the Workletter and, unless the default involves a hazardous condition, which shall be cured forthwith or unless the failure to perform is a Default for which this Lease specifies there is no cure or grace period, fails to cure such default within thirty (30) days after written notice thereof to Tenant, provided that, if Tenant has exercised reasonable diligence to cure such failure and such failure cannot reasonably be cured within such thirty (30) day period despite reasonable diligence, Tenant shall not be in default under this subsection so long as Tenant diligently and continuously prosecutes the cure to completion;

   (iii) the interest of Tenant in this Lease is levied upon under execution or other legal process;

   (iv) a petition is filed by or against Tenant to declare Tenant bankrupt or seeking a plan of reorganization or arrangement under any Chapter of the Bankruptcy Act, or any amendment, replacement or substitution therefor, or to delay payment of, reduce or modify Tenant’s debts, which in the case of an involuntary action is not discharged within thirty (30) days;

   (v) Tenant is declared insolvent by Law or any assignment of Tenant’s property is made for the benefit of creditors;

   (vi) a receiver is appointed for Tenant or Tenant’s property, which appointment is not discharged within thirty (30) days;

   (vii) any action taken by or against Tenant to reorganize or modify Tenant’s capital structure in a materially adverse way which in the case of an involuntary action is not discharged within thirty (30) days; or

   (viii) upon the dissolution of Tenant.

11.02 LANDLORD’S REMEDIES

   (a) A Default shall constitute a breach of the Lease for which Landlord shall have the rights and remedies set forth in this Section 11.02 and all other rights and remedies set forth in this Lease or now or hereafter allowed by Law, whether legal or equitable, and all rights and remedies of Landlord shall be cumulative and none shall exclude any other right or remedy.
(b) With respect to a Default, at any time Landlord may terminate Tenant's right to possession by written notice to Tenant stating such election. Upon the termination of Tenant's right to possession pursuant to this Section 11.02, Tenant's right to possession shall terminate and this Lease shall terminate, and Tenant shall remain liable as hereinafter provided. Upon such termination, Landlord shall have the right, subject to applicable Law, to re-enter the Premises and dispossess Tenant and the legal representatives of Tenant and all other occupants of the Premises by unlawful detainer or other summary proceedings, or otherwise as permitted by Law, regain possession of the Premises and remove their property (including their trade fixtures, personal property and those Tenant Additions which Tenant is required or permitted to remove under Article Twelve), but Landlord shall not be obligated to effect such removal, and such property may, at Landlord's option, be stored elsewhere, sold or otherwise dealt with as permitted by Law, at the risk of, expense of and for the account of Tenant, and the proceeds of any sale shall be applied pursuant to Law. Landlord shall in no event be responsible for the value, preservation or safekeeping of any such property. Tenant hereby waives all claims for damages that may be caused by Landlord's removing or storing Tenant's personal property pursuant to this Section or Section 12.01, and Tenant hereby indemnifies, and agrees to defend, protect and hold harmless the Indemnitees from any and all loss, claims, demands, actions, expenses, liability and cost (including reasonable attorneys' fees and expenses) arising out of or in any way related to such removal or storage. Upon such written termination of Tenant's right to possession and this Lease, Landlord shall have the right to recover damages for Tenant's Default as provided herein or by Law, including the following damages provided by California Civil Code Section 1951.2:

1. The worth at the time of award of the unpaid Rent which had been earned at the time of termination;
2. The worth at the time of award of the amount by which the unpaid Rent which would have been earned after termination until the time of award exceeds the amount of such Rent loss that Tenant proves could reasonably have been avoided;
3. The worth at the time of award of the amount by which the unpaid Rent for the balance of the term of this Lease after the time of award exceeds the amount of such Rent loss that Tenant proves could be reasonably avoided; and
4. Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom. The word "rent" as used in this Section 11.02 shall have the same meaning as the defined term Rent in this Lease. The "Worth at the time of award" of the amount referred to in clauses (1) and (2) above is computed by allowing interest at the Default Rate. The worth at the time of award of the amount referred to in clause (3) above is computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus one percent (1%). For the purpose of determining unpaid Rent under clause (3) above, the monthly Rent reserved in this Lease shall be deemed to be the sum of the Monthly Base Rent, and monthly Storage Space Rent, if any, and the amounts last payable by Tenant as Rent Adjustments for the calendar year in which Landlord terminated this Lease as provided hereinafter.

(c) Even if Tenant is in Default and/or has abandoned the Premises, this Lease shall continue in effect for so long as Landlord does not terminate Tenant's right to possession by written notice as provided in Section 11.02(b) above, and Landlord may enforce all its rights and remedies under this Lease, including the right to recover Rent as it becomes due under this Lease. In such event, Landlord shall have all of the rights and remedies of a landlord under California Civil Code Section 1951.4 (lessor may continue Lease in effect after Tenant's Default and abandonment and recover Rent as it becomes due, if Tenant has the right to sublet or assign, subject only to reasonable limitations), or any successor statute. During such time as Tenant is in Default, if Landlord has not terminated this Lease by written notice and if Tenant requests Landlord's consent to an assignment of this Lease or a sublease of the Premises, subject to Landlord's option to recapture pursuant to Section 10.02, Landlord shall not unreasonably withhold its consent to such assignment or sublease. Tenant acknowledges and agrees that the provisions of Article Ten shall be deemed to constitute reasonable limitations of Tenant's right to assign or sublet Tenant acknowledges and agrees that in the absence of written notice pursuant to Section 11.02(b) above terminating Tenant's right to possession, no other act of Landlord shall constitute a termination of Tenant's right to possession or an acceptance of Tenants surrender of the Premises, including acts of maintenance or preservation or efforts to relet the Premises or the appointment of a receiver upon initiative of Landlord to protect

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Landlord’s interest under this Lease or the withholding of consent to a subletting or assignment, or terminating a subletting or assignment, if in accordance with other provisions of this Lease.

(d) In the event that Landlord seeks an injunction with respect to a breach or threatened breach by Tenant of any of the covenants, conditions or provisions of this Lease, Tenant agrees to pay the premium for any bond required in connection with such injunction.

(e) Tenant hereby waives any and all rights to relief from forfeiture, redemption or reinstatement granted by Law (including California Civil Code of Procedure Sections 1174 and 1179) in the event of Tenant being evicted or dispossessed for any cause or in the event of Landlord obtaining possession of the Premises by reason of Tenants Default or otherwise;

(f) When this Lease requires giving or service of a notice of Default or of a failure of Tenant to observe or perform any covenant, condition or provision of this Lease which will constitute a Default unless Tenant so observes or performs within any applicable cure period, and so long as the notice given or served provides Tenant the longer of any, applicable cure period required by this Lease or by statute, then the giving of any equivalent or similar statutory notice, including any equivalent or similar notices required by California Code of Civil Procedure Section 1161 or any similar or successor statute, shall replace and suffice as any notice required under this Lease. When a statute requires service of a notice in a particular manner, service of that notice (or a similar notice required by this Lease) in the manner required by Article Twenty-four shall replace and satisfy the statutory service—of—notice procedures, except that any notice of unlawful detainer required by California Code of Civil Procedure Section 1161 or any similar or successor statute shall be served as required by Code of Civil Procedure Section 1162 or any similar or successor statute, and for purposes of Code of Civil Procedure Section 1162 or any similar or successor statute, Tenant’s “place of residence” and “usual place of business” shall mean the address specified by Tenant for notice pursuant to Section 1.01 of this Lease, as changed by Tenant pursuant to Article Twenty-four of this Lease.

(g) The voluntary or other surrender or termination of this Lease, or a mutual termination or cancellation thereof, shall not work a merger and shall terminate all or any existing assignments, subleases, subtenancies or occupancies permitted by Tenant, except if and as otherwise specified in writing by Landlord.

(h) No delay or omission in the exercise of any right or remedy of Landlord upon any default by Tenant, and no exercise by Landlord of its rights pursuant to Section 2615 to perform any duty which Tenant fails timely to perform, shall impair any right or remedy or be construed as a waiver. No provision of this Lease shall be deemed waived by Landlord unless such waiver is in a writing signed by Landlord. The waiver by Landlord of any breach of any provision of this Lease shall not be deemed a waiver of any subsequent breach of the same or any other provision of this Lease.

11.03 ATTORNEY’S FEES

In the event any party brings any suit or other proceeding with respect to the subject matter or enforcement of this Lease, the prevailing party (as determined by the court, agency or other authority before which such suit or proceeding is commenced) shall, in addition to such other relief as may be awarded, be entitled to recover reasonable attorneys’ fees, expenses and costs of investigation as actually incurred, including court costs, expert witness fees, costs and expenses of investigation, and all reasonable attorneys’ fees, costs and expenses in any such suit or proceeding (including in any action or participation in or in connection with any case or proceeding under the Bankruptcy Code, 11 United States Code Sections 101 et seq., or any successor statutes, in establishing or enforcing the right to indemnification, in appellate proceedings, or in connection with the enforcement or collection of any judgment obtained in any such suit or proceeding).

11.04 BANKRUPTCY

The following provisions shall apply in the event of the bankruptcy or insolvency of Tenant:

(a) In connection with any proceeding under Chapter 7 of the Bankruptcy Code where the trustee of Tenant elects to assume this Lease for the purposes of assigning it, such election or assignment, may only be made upon compliance with the provisions of (b) and (c) below, which conditions Landlord and Tenant acknowledge to be commercially reasonable. In the event the trustee elects to reject this Lease then Landlord shall immediately be entitled to possession of the Premises without further obligation to Tenant or the trustee.
(b) Any election to assume this Lease under Chapter 11 or 13 of the Bankruptcy Code by Tenant as debtor-in-possession or by Tenant’s trustee (the “Electing Party”) must provide for.

The Electing Party to cure or provide to Landlord adequate assurance that it will cure all monetary defaults under this Lease within fifteen (15) days from the date of assumption and it will cure all nonmonetary defaults under this Lease within thirty (30) days from the date of assumption. Landlord and Tenant acknowledge such condition to be commercially reasonable.

(c) If the Electing Party has assumed this Lease or elects to assign Tenant’s interest under this Lease to any other person, such interest may be assigned only if the intended assignee has provided adequate assurance of future performance (as herein defined), of all of the obligations imposed on Tenant under this Lease.

For the purposes hereof, “adequate assurance of future performance” means that Landlord has ascertained that each of the following conditions has been satisfied:

(i) The assignee has submitted a current financial statement, certified by its chief financial officer, which shows a net worth and working capital in amounts sufficient to assure the future performance by the assignee of Tenants obligations under this Lease; and

(ii) Landlord has obtained consents or waivers from any third parties which may be required under a lease, mortgage, financing arrangement, or other agreement by which Landlord is bound, to enable Landlord to permit such assignment.

(d) Landlord’s acceptance of rent or any other payment from any trustee, receiver, assignee, person, or other entity will not be deemed to have waived, or waive, the requirement of Landlord’s consent, Landlord’s right to terminate this Lease for any transfer of Tenant’s interest under this Lease without such consent, or Landlord’s claim for any amount of Rent due from Tenant.

11.05 LANDLORD’S DEFAULT

Landlord shall be in default hereunder in the event Landlord has not begun and pursued with reasonable diligence the cure of any failure of Landlord to meet its obligations hereunder within thirty (30) days after the receipt by Landlord of written notice from Tenant of the alleged failure to perform. In no event shall Tenant have the right to terminate or rescind this Lease as a result of Landlord’s default as to any covenant or agreement contained in this Lease. Tenant hereby waives such remedies of termination and rescission and hereby agrees that Tenant’s remedies for default hereunder and for breach of any promise or inducement shall be limited to a suit for damages and/or injunction. In addition, Tenant hereby covenants that, prior to the exercise of any such remedies, it will give Mortgagee notice and a reasonable time to cure any default by Landlord.

ARTICLE TWELVE
SURRENDER OF PREMISES

12.01 IN GENERAL

Upon the Termination Date, Tenant shall surrender and vacate the Premises immediately and deliver possession thereof to Landlord in a clean, good and tenantable condition, ordinary wear and tear, and damage caused by Landlord excepted. Tenant shall deliver to Landlord all keys to the Premises. Tenant shall remove from the Premises all movable personal property of Tenant and Tenant’s trade fixtures, including, subject to Section 6.04, cabling for any of the foregoing. Tenant shall be entitled to remove such Tenant Additions which at the time of their installation Landlord and Tenant agreed may be removed by Tenant. Tenant shall also remove such other Tenant Additions as required by Landlord, including any Tenant Additions containing Hazardous Material. Tenant immediately shall repair all damage resulting from removal of any of Tenant’s property, furnishings, Tenant’s Personal Property or Tenant Additions, shall close all floor, ceiling and roof openings and shall restore the Premises to a tenantable condition as reasonably determined by Landlord. If any of the Tenant Additions which were installed by Tenant involved the lowering of ceilings, raising of floors or the installation of specialized wall or floor coverings or lights, then Tenant shall also be obligated to return such surfaces to their condition prior to the commencement of this Lease. Tenant shall also be required to close any staircases or other
openings between floors. Notwithstanding any of the foregoing to the contrary, if so requested by Tenant in writing (and prominently in all capital and bold lettering which also states that such request is pursuant to Section 12.01 of the Lease) at the time Tenant requests approval of any Tenant Work or subsequent Tenant Alterations, Landlord shall advise Tenant at the time of Landlord's approval of such Tenant Work or Tenant Alterations as to whether Landlord will require that such Tenant Work or Tenant Alterations be removed by Tenant from the Premises; provided, however, regardless of the foregoing, in any event, Landlord may require removal of any Tenant Additions containing Hazardous Material and all Tenant's trade fixtures, and, subject to Section 6.03, cabling and wiring installed for Tenant's personal property or trade fixture. In the event possession of the Premises is not delivered to Landlord when required hereunder, or if Tenant shall fail to remove those items described above, Landlord may (but shall not be obligated to), at Tenant's expense, remove any of such property and store, sell or otherwise deal with such property as provided in Section 11.02(b), including the waiver and indemnity obligations provided in that Section, and undertake, at Tenant's expense, such restoration work as Landlord deems necessary or advisable.

12.02 LANDLORD'S RIGHTS

All property which may be removed from the Premises by Landlord shall be conclusively presumed to have been abandoned by Tenant and Landlord may deal with such property as provided in Section 11.02(b), including the waiver and indemnity obligations provided in that Section. Tenant shall also reimburse Landlord for all costs and expenses incurred by Landlord in removing any of Tenant Additions required to be removed pursuant to Section 12.01 above and in restoring the Premises to the condition required by this Lease at the Termination Date.

ARTICLE THIRTEEN

HOLDING OVER

Tenant shall pay Landlord the greater of (i) 150% of the monthly Rent payable for the month immediately preceding the holding over (including increases for Rent Adjustments which Landlord may reasonably estimate) or, (ii) 150% of the fair market rental value of the Premises as reasonably determined by Landlord for each month or portion thereof that Tenant retains possession of the Premises, or any portion thereof, after the Termination Date (without reduction for any partial month that Tenant retains possession). Tenant shall also pay all damages sustained by Landlord by reason of such retention of possession. The provisions of this Article shall not constitute a waiver by Landlord of any re-entry rights of Landlord and Tenants continued occupancy of the Premises shall be as a tenancy in sufferance.

ARTICLE FOURTEEN

DAMAGE BY FIRE OR OTHER CASUALTY

14.01 SUBSTANTIAL UNTENANTABILITY

(a) If any fire or other casualty (whether insured or uninsured) renders all or a substantial portion of the Premises or the Building untenantable, Landlord shall, with reasonable promptness after the occurrence of such damage, estimate the length of time that will be required to substantially complete the repair and restoration and shall by notice advise Tenant of such estimate ("Landlord's Notice"). If Landlord estimates that the amount of time required to substantially complete such repair and restoration will exceed one hundred eighty (180) days from the date such damage occurred, then Landlord, or Tenant if all or a substantial portion of the Premises is rendered untenantable, shall have the right to terminate this Lease as of the date of such damage upon giving written notice to the other at any time within twenty (20) days after delivery of Landlord’s Notice, provided that if Landlord so chooses, Landlord’s Notice may also constitute such notice of termination.

(b) In the event that the Building is damaged or destroyed to the extent of more than twenty-five percent (25%) of its replacement cost or to any extent if no insurance proceeds or insufficient insurance proceeds are receivable by Landlord, or if the buildings at the Project shall be damaged to the extent of fifty percent (50%) or more of the replacement value or to any extent if no insurance proceeds or insufficient insurance proceeds are receivable by Landlord, and regardless of whether or not the Premises be damaged, Landlord may elect by written notice to Tenant given within thirty (30) days after the occurrence of the casualty to terminate this Lease in lieu of so restoring the Premises, in which event this Lease shall terminate as of the date specified in Landlord’s notice, which date shall be no later than sixty (60) days following the date of Landlord’s notice.
(c) Unless this Lease is terminated as provided in the preceding Subsections 14.01 (a) and (b), Landlord shall proceed with reasonable promptness to repair and restore the Premises to its condition as existed prior to such casualty, subject to reasonable delays for insurance adjustments and Force Majeure delays, and also subject to zoning Laws and building codes then in effect Landlord shall have no liability to Tenant, and Tenant shall not be entitled to terminate this Lease if such repairs and restoration are not in fact completed within the time period estimated by Landlord so long as Landlord shall proceed with reasonable diligence to complete such repairs and restoration.

(d) Tenant acknowledges that Landlord shall be entitled to the full proceeds of any insurance coverage, whether carried by Landlord or Tenant, for damages to the Premises, except for those proceeds of Tenant’s insurance of its own personal property and equipment which would be removable by Tenant at the Termination Date. All such insurance proceeds shall be payable to Landlord whether or not The Premises are to be repaired and restored, provided, however, if this Lease is not terminated and the parties proceed to repair and restore Tenant Additions at Tenant’s cost, to the extent Landlord received proceeds of Tenant’s insurance covering Tenant Additions, such proceeds shall be applied to reimburse Tenant for its cost of repairing and restoring Tenant Additions.

(e) Notwithstanding anything in this Article Fourteen to the contrary: (i) Landlord shall have no duty pursuant to this Section to repair or restore any portion of any Tenant Additions or to expend for any repair or restoration of the Premises or Building amounts in excess of insurance proceeds paid to Landlord and available for repair or restoration; and (ii) Tenant shall not have the right to terminate this Lease pursuant to this Section if any damage or destruction was caused by the gross negligence or willful and wrongful act of Tenant, its agent or employees. Whether or not the Lease is terminated pursuant to this Article Fourteen, in no event shall Tenant be entitled to any compensation or damages for loss of the use of the whole or any part of the Premises or for any inconvenience or annoyance occasioned by any such damage, destruction, rebuilding or restoration of the Premises or the Building or access thereto.

(f) Any repair or restoration of the Premises performed by Tenant shall be in accordance with the provisions of Article Nine hereof.

14.02 INSUBSTANTIAL UNTENANTABILITY

Unless this Lease is terminated as provided in the preceding Subsections 14.01 (a) and (b), then Landlord shall proceed to repair and restore the Building or the Premises other than Tenant Additions, with reasonable promptness, unless such damage is to the Premises and occurs during the last six (6) months of the Term, in which event either Tenant or Landlord shall have the right to terminate this Lease as of the date of such casualty by giving written notice thereof to the other within twenty (20) days after the date of such casualty. Notwithstanding the foregoing, Landlord’s obligation to repair shall be limited in accordance with the provisions of Section 14.01 above.

14.03 RENT ABATEMENT

Except for (i) the willful and wrongful act of Tenant or its agents, employees, contractors or invitees, or (ii) the gross negligence of Tenant or its agents, employees, contractors or invitees only if and to the extent Landlord receives rental abatement insurance proceeds covering abatement of the Rent hereunder, then, if all or any part of the Premises are rendered untenanted by fire or other casualty and this Lease is not terminated, Monthly Base Rent and Rent Adjustments shall abate for that part of the Premises which is untenanted on a per diem basis from the date of the casualty until Landlord has Substantially Completed the repair and restoration work in the Premises which it is required to perform, provided, that as a result of such casualty, Tenant does not occupy the portion of the Premises which is untenanted during such period.

14.04 WAIVER OF STATUTORY REMEDIES

The provisions of this Lease, including this Article Fourteen, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, the Premises or the Property or any part of either, and any Law, including Sections 1932(2), 1933(4), 1941 and 1942 of the California Civil Code, with respect to any rights or obligations concerning damage or destruction shall have no application to this Lease or to any damage to or destruction of all or any part of the Premises or the Property or any part of either, and are hereby waived.

EMINENT DOMAIN

ARTICLE FIFTEEN
15.01 TAKING OF WHOLE OR SUBSTANTIAL PART

In the event the whole or any substantial part of the Building or of the Premises is taken or condemned by any competent authority for any public use or purpose (including a deed given in lieu of condemnation) and is thereby rendered untenantable, this Lease shall terminate as of the date title vests in such authority or any earlier date on which possession is required to be surrendered to such authority, and Monthly Base Rent and Rent Adjustments shall be apportioned as of the Termination Date. Further, if at least twenty-five percent (25%) of the rentable area of the Project is taken or condemned by any competent authority for any public use or purpose (including a deed given in lieu of condemnation), and regardless of whether or not the Premises be so taken or condemned, Landlord may elect by written notice to Tenant to terminate this Lease as of the date title vests in such authority or any earlier date on which possession is required to be surrendered to such authority, and Monthly Base Rent and Rent Adjustments shall be apportioned as of the Termination Date. Landlord may, without any obligation to Tenant, agree to sell or convey to the taking authority the Premises, the Building, Tenant's Phase, the Project or any portion thereof sought by the taking authority, free from this Lease and the right of Tenant hereunder, without first requiring that any action or proceeding be instituted or, if instituted, pursued to a judgment. Notwithstanding anything to the contrary herein set forth, in the event the taking of the Building or Premises is temporary (for less than the remaining term of the Lease), Landlord may elect either (i) to terminate this Lease or (ii) permit Tenant to receive the entire award attributable to the Premises in which case Tenant shall continue to pay Rent and this Lease shall not terminate.

15.02 TAKING OF PART

In the event a part of the Building or the Premises is taken or condemned by any competent authority (or a deed is delivered in lieu of condemnation) and this Lease is not terminated, the Lease shall be amended to reduce or increase, as the case may be, the Monthly Base Rent and Tenant's Share to reflect the Rentable Area of the Premises or Building, as the case may be, remaining after any such taking or condemnation. Landlord, upon receipt and to the extent of the award in condemnation (or proceeds of sale) shall make necessary repairs and restorations to the Premises (exclusive of Tenant Additions) and to the Building to the extent necessary to constitute the portion of the Building not so taken or condemned as a complete architectural and economically efficient unit Notwithstanding the foregoing, if as a result of any taking, or a governmental order that the grade of any street or alley adjacent to the Building is to be changed and such taking or change of grade makes it necessary or desirable to substantially remodel or restore the Building or prevents the economical operation of the Building, Landlord shall have the right to terminate this Lease upon ninety (90) days prior written notice to Tenant.

15.03 COMPENSATION

Landlord shall be entitled to receive the entire award (or sale proceeds) from any such taking, condemnation or sale without any payment to Tenant, and Tenant hereby assigns to Landlord Tenants interest, if any, in such award; provided, however, Tenant shall have the right separately to pursue against the condemning authority a separate award in respect of the loss, if any, to Tenant Additions paid for by Tenant without any credit or allowance from Landlord, for fixtures or personal property of Tenant, or for relocation or business interruption expenses, so long as there is no diminution of Landlord’s award as a result.

ARTICLE SIXTEEN

INSURANCE

16.01 TENANTS INSURANCE

Tenant, at Tenant’s expense, agrees to maintain in force, with a company or companies acceptable to Landlord, during the Term: (a) Commercial General Liability Insurance on a primary basis and without any right of contribution from any insurance carried by Landlord covering the Premises on an occurrence basis against all claims for personal injury, bodily injury, death and property damage, including contractual liability covering the indemnification provisions in this Lease. Such insurance shall be for such limits that are reasonably required by Landlord from time to time but not less than a combined single limit of Five Million and No/100 Dollars ($5,000,000.00); (b) Workers’ Compensation and Employers’ Liability Insurance to the extent required by and in accordance with the Laws of the State of California; (c) “All Risks” property insurance in an amount adequate to cover the full replacement cost of all Tenant Additions to the Premises, equipment, installations, fixtures and contents of the Premises in the event of loss; (d) In the event a motor vehicle is to be used by Tenant in connection with its business operation from the Premises, Comprehensive Automobile Liability Insurance coverage with limits of not less than Three Million and No/100 Dollars ($3,000,000.00) combined single limit coverage against bodily injury liability and property damage liability arising out of the use by
or on behalf of Tenant, its agents and employees in connection with this Lease, of any owned, non-owned or hired motor vehicles; and (e) such other insurance or coverages as Landlord reasonably requires.

16.02 FORM OF POLICIES

Each policy referred to in 16.01 shall satisfy the following requirements. Each policy shall (i) name Landlord and the Indemnitees as additional insureds (except Workers’ Compensation and Employers’ Liability Insurance), (ii) be issued by one or more responsible insurance companies licensed to do business in the State of California reasonably satisfactory to Landlord, (iii) where applicable, provide for deductible amounts satisfactory to Landlord and not permit co-insurance, (iv) shall provide that such insurance may not be canceled or amended without thirty (30) days’ prior written notice to the Landlord, and (v) each policy of “All-Risks” property insurance shall provide that the policy shall not be invalidated should the insured waive in writing prior to a loss, any or all rights of recovery against any other party for losses covered by such policies. Tenant shall deliver to Landlord, certificates of insurance and at Landlord’s request, copies of all policies and renewals thereof to be maintained by Tenant hereunder, not less than ten (10) days prior to the Commencement Date and not less than ten (10) days prior to the expiration date of each policy.

16.03 LANDLORD’S INSURANCE

Landlord agrees to purchase and keep in full force and effect during the Term hereof, including any extensions or renewals thereof, insurance under policies issued by insurers of recognized responsibility, qualified to do business in the State of California on the Building in amounts not less than the greater of eighty (80%) percent of the then full replacement cost (without depreciation) of the Building (above foundations and excluding Tenant Additions to the Premises) or an amount sufficient to prevent Landlord from becoming a co-insurer under the terms of the applicable policies, against fire and such other risks as may be included in standard forms of all risk coverage insurance reasonably available from time to time. Landlord agrees to maintain in force during the Term, Commercial General Liability Insurance covering the Building on an occurrence basis against all claims for personal injury, bodily injury, death and property damage. Such insurance shall be for a combined single limit of Five Million and No/100 Dollars ($5,000,000.00). Neither Landlord’s obligation to carry such insurance nor the carrying of such insurance shall be deemed to be an indemnity by Landlord with respect to any claim, liability, loss, cost or expense due, in whole or in part, to Tenants negligent acts or omissions or willful misconduct. Without obligation to do so, Landlord may, in its sole discretion from time to time, carry insurance in amounts greater and/or for coverage additional to the coverage and amounts set forth above.

16.04 WAIVER OF SUBROGATION

(a) Landlord agrees that, if obtainable at no, or minimal, additional cost, and so long as the same is permitted under the laws of the State of California, it will include in its “All Risks” policies appropriate clauses pursuant to which the insurance companies (i) waive all right of subrogation against Tenant with respect to losses payable under such policies and/or (ii) agree that such policies shall not be invalidated should the insured waive in writing prior to a loss any or all right of recovery against any party for losses covered by such policies.

(b) Tenant agrees to include, if obtainable at no, or minimal, additional cost, and so long as the same is permitted under the laws of the State of California, in its “All Risks” insurance policy or policies on Tenant Additions to the Premises, whether or not removable, and on Tenants furniture, furnishings, fixtures and other property removable by Tenant under the provisions of this Lease appropriate clauses pursuant to which the insurance company or companies (i) waive the right of subrogation against Landlord and/or any tenant of space in the Building with respect to losses payable under such policy or policies and/or (ii) agree that such policy or policies shall not be invalidated should the insured waive in writing prior to a loss any or all right of recovery against any party for losses covered by such policy or policies. If Tenant is unable to obtain in such policy or policies either of the clauses described in the preceding sentence, Tenant shall, if legally possible and without necessitating a change in insurance carriers, have Landlord named in such policy or policies as an additional insured. If Landlord shall be named as an additional insured in accordance with the foregoing, Landlord agrees to endorse promptly to the order of Tenant, without recourse, any check, draft, or order for the payment of money representing the proceeds of any such policy or representing any other payment growing out of or connected with said policies, and Landlord does hereby irrevocably waive any and all rights in and to such proceeds and payments.

(c) Provided that Landlord’s right of full recovery under its policy or policies aforesaid is not adversely affected or prejudiced thereby, Landlord hereby waives any and all right of recovery which it might otherwise have against Tenant, its servants, agents and employees, for
loss or damage occurring to the Real Property and the fixtures, appurtenances and equipment therein, except Tenant Additions, to the extent the same is covered by Landlord’s insurance, notwithstanding that such loss or damage may result from the negligence or fault of Tenant, its servants, agents or employees. Provided that Tenants right of full recovery under its aforesaid policy or policies is not adversely affected or prejudiced thereby, Tenant hereby waives any and all right of recovery which it might otherwise have against Landlord, its servants, and employees and against every other tenant in the Real Property who shall have executed a similar waiver as set forth in this Section 16.04 (c) for loss or damage to Tenant Additions, whether or not removable, and to Tenant’s furniture, furnishings, fixtures and other property removable by Tenant under the provisions hereof to the extent the same is covered or coverable by Tenants insurance required under this Lease, notwithstanding that such loss or damage may result from the negligence or fault of Landlord, its servants, agents or employees, or such other tenant and the servants, agents or employees thereof.

(d) Landlord and Tenant hereby agree to advise the other promptly if the clauses to be included in their respective insurance policies pursuant to subparagraphs (a) and (b) above cannot be obtained on the terms hereinbefore provided and thereafter to furnish the other with a certificate of insurance or copy of such policies showing the naming of the other as an additional insured, as aforesaid. Landlord and Tenant hereby also agree to notify the other promptly of any cancellation or change of the terms of any such policy which would affect such clauses or naming. All such policies which name both Landlord and Tenant as additional insureds shall, to the extent obtainable, contain agreements by the insurers to the effect that no act or omission of any additional insured will invalidate the policy as to the other additional insureds.

ARTICLE SEVENTEEN
WAIVER OF CLAIMS AND INDEMNITY

17.01 WAIVER OF CLAIMS

To the extent permitted by Law, Tenant releases the Indemnitees from, and waives all claims for, damage to person or property sustained by the Tenant or any occupant of the Premises or the Property resulting directly or indirectly from any existing or future condition, defect, matter or thing in and about the Premises or the Property, or any part of either, or any equipment or appurtenance therein, or resulting from any accident in or about the Premises or the Property, or resulting directly or indirectly from any act or neglect of any tenant or occupant of the Property or of any other person, including Landlord’s agents and servants, except to the extent caused by the gross negligence or willful and wrongful act of any of the Indemnitees. If any such damage, whether to the Premises or the Property or any part of either, or whether to Landlord or to other tenants in the Property, results from any act or neglect of Tenant, its employees, servants, agents, contractors, invitees or customers, Tenant shall be liable therefor and Landlord may, at Landlord’s option, repair such damage and Tenant shall, upon demand by Landlord, as payment of additional Rent hereunder, reimburse Landlord within ten (10) days of demand for the total cost of such repairs, in excess of amounts, if any, paid to Landlord under insurance covering such damages. Tenant shall not be liable for any such damage caused by its acts or neglect to the extent that Landlord or a tenant has recovered any amount of the damage from proceeds of insurance policies and the insurance company has waived its right of subrogation against Tenant.

17.02 INDEMNITY BY TENANT

To the extent permitted by Law, Tenant hereby indemnifies, and agrees to protect, defend and hold the Indemnitees harmless, against any and all actions, claims, demands, liability, costs and expenses, including reasonable attorneys’ fees and expenses for the defense thereof, arising from Tenant’s occupancy of the Premises, from the undertaking of any Tenant Additions or repairs to the Premises, from the conduct of Tenants business on the Premises, or from any breach or default on the part of Tenant in the performance of any covenant or agreement on the part of Tenant to be performed pursuant to the terms of this Lease, or from any willful act or negligence of Tenant, its agents, contractors, servants, employees, customers or invitees, in or about the Premises or the Property or any part of either. In case of any action or proceeding brought against the Indemnitees by reason of any such claim, upon notice from Landlord, Tenant covenants to defend such action or proceeding by counsel chosen by Landlord, in Landlord’s sole discretion. Landlord reserves the right to settle, compromise or dispose of any and all actions, claims and demands related to the foregoing indemnity. The foregoing indemnity shall not operate to relieve an Indemnitee of liability to the extent such liability is caused by the
gross negligence or willful and wrongful act of such Indemnitee. Further, the foregoing indemnity is subject to and shall not
diminish any waivers in effect in accordance with Section 16.04 by Landlord or its insurers to the extent of amounts, if any, paid
to Landlord under its “All-Risks” property insurance.

17.03 WAIVER OF CONSEQUENTIAL DAMAGES

To the extent permitted by law, Tenant hereby waives and releases the Indemnitees from any consequential damages,
compensation or claims for inconvenience or loss of business, rents or profits as a result of any injury or damage, whether or not
cased by the willful and wrongful act of any of the Indemnitees.

ARTICLE EIGHTEEN
RULES AND REGULATIONS

18.01 RULES

Tenant agrees for itself and for its subtenants, employees, agents, and invitees to comply with all reasonable rules and
regulations for use of the Premises, the Building, the Phase and the Project imposed by Landlord, as the same may be revised
from time to time, including the following: (a) Tenant shall comply with all of the requirements of Landlord’s emergency response
plan, as the same may be amended from time to time; and (b) Tenant shall not place any furniture, furnishings, fixtures or
equipment in the Premises in a manner so as to obstruct the windows of the Premises to cause the Building, in Landlord’s good
faith determination, to appear unsightly from the exterior. Such rules and regulations are and shall be imposed for the
cleanliness, good appearance, proper maintenance, good order and reasonable use of the Premises, the Building, the Phase
and the Project and as may be necessary for the enjoyment of the Building and the Project by all tenants and their clients,
customers, and employees.

18.02 ENFORCEMENT

Nothing in this Lease shall be construed to impose upon the Landlord any duty or obligation to enforce the rules and regulations
as set forth above or as hereafter adopted, or the terms, covenants or conditions of any other lease as against any other tenant,
and the Landlord shall not be liable to the Tenant for violation of the same by any other tenant, its servants, employees, agents,
visitors or licensees. Landlord shall use reasonable efforts to enforce the rules and regulations of the Building in a uniform and
non-discriminatory manner.

ARTICLE NINETEEN
LANDLORD’S RESERVED RIGHTS

Landlord shall have the following rights exercisable without notice to Tenant and without liability to Tenant for damage or injury to
persons, property or business and without being deemed an eviction or disturbance of Tenant’s use or possession of the
Premises or giving rise to any claim for offset or abatement of Rent (1) to change the Building’s name or street address upon
thirty (30) days’ prior written notice to Tenant (2) to install, affix and maintain all signs on the exterior and/or interior of the
Building; (3) to designate and/or approve prior to installation, all types of signs, window shades, blinds, drapes, awnings or other
similar items, and all internal lighting that may be visible from the exterior of the Premises; (4) upon reasonable notice to Tenant,
to display the Premises to prospective purchasers at reasonable hours at any time during the Term and to prospective tenants at
reasonable hours during the last twelve (12) months of the Term; (5) to grant to any party the exclusive right to conduct any
business or render any service in or to the Building, provided such exclusive right shall not operate to prohibit Tenant from using
the Premises for the purpose permitted hereunder, (6) to change the arrangement and/or location of entrances or passageways,
doors and doorways, corridors, elevators, stairs, washrooms or public portions of the Building, and to close entrances, doors,
corridors, elevators or other facilities, provided that such action shall not materially and adversely interfere with Tenant’s access
to the Premises or the Building; (7) to have access for Landlord and other tenants of the Building to any mail chutes and boxes
located in or on the Premises as required by any applicable rules of the United States Post Office; and (8) to close the Building
after Standard Operating Hours, except that Tenant and its employees and invitees shall be entitled to admission at all times,
under such regulations as Landlord prescribes for security purposes.

ARTICLE TWENTY

ESTOPPEL CERTIFICATE
20.01 IN GENERAL
Within fifteen (15) days after request therefor by Landlord, Mortgagee or any prospective mortgagee or owner, Tenant agrees as directed in such request to execute an Estoppel Certificate in recordable form, binding upon Tenant, certifying (i) that this Lease is unmodified and in full force and effect (or if there have been modifications, a description of such)

Rider 2-34
modifications and that this Lease as modified is in full force and effect); (ii) the dates to which Rent has been paid; (iii) that Tenant is in the possession of the Premises if that is the case; (iv) that Landlord is not in default under this Lease, or, if Tenant believes Landlord is in default, the nature thereof in detail; (v) that Tenant has no offsets or defenses to the performance of its obligations under this Lease (or if Tenant believes there are any offsets or defenses, a full and complete explanation thereof); (vi) that the Premises have been completed in accordance with the terms and provisions hereof, that Tenant has accepted the Premises and the condition thereof and of all improvements thereto and has no claims against Landlord or any other party with respect thereto; (vii) that if an assignment of rents or leases has been served upon the Tenant by a Mortgagee, Tenant will acknowledge receipt thereof and agree to be bound by the provisions thereof, (viii) that Tenant will give to the Mortgagee copies of all notices required or permitted to be given by Tenant to Landlord; and (ix) to any other information reasonably requested.

20.02 ENFORCEMENT

In the event that Tenant fails to deliver an Estoppel Certificate within three (3) business days after Tenant has received notice from Landlord of Tenant’s failure to deliver an Estoppel Certificate within the time prescribed in Section 20.01 above, then such failure shall be a Default for which there shall be no additional cure or grace period. In addition to any other remedy available to Landlord, Landlord may impose a charge equal to $500.00 for each day that Tenant fails to deliver an Estoppel Certificate and Tenant shall be deemed to have irrevocably appointed Landlord as Tenants attorney-in-fact to execute and deliver the subject Estoppel Certificate that Tenant has failed to deliver.

ARTICLE TWENTY-ONE

INTENTIONALLY OMITTED

ARTICLE TWENTY-TWO

REAL ESTATE BROKERS

Landlord and Tenant represent to each other that in connection with this Lease they are represented by Tenant's Broker identified in Section 1.01(19) and. Landlord's Broker identified in Section 1.01(19), and that except for Tenant's Broker and Landlord's Broker, neither has dealt with any real estate broker, sales person, or finder in connection with this Lease, and no such person initiated or participated in the negotiation of this Lease. Landlord and Tenant hereby indemnify and agree to protect, defend and hold the other harmless from and against all claims, losses, damages, liability, costs and expenses (including, without limitation, reasonable attorneys’ fees and expenses) by virtue of any broker, agent or other person claiming a commission or other form of compensation by virtue of alleged representation of, or dealings or discussions with, Landlord or Tenant, as applicable, with respect to the subject matter of this Lease, except for Tenant’s Broker and except for a commission payable to Tenants Broker to the extent provided for in a separate written agreement between Tenants Broker and Landlord’s Broker. Tenant is not obligated to pay or fund any amount to Landlord’s Broker, and Landlord hereby agrees to pay such commission, if any, to which Landlord’s Broker is entitled in connection with the subject matter of this Lease pursuant to Landlord’s separate written agreement with Landlord’s Broker. Such commission shall include an amount to be shared by Landlord’s Broker with Tenant’s Broker to the extent that Tenant’s Broker and Landlord’s Broker have entered into a separate agreement between themselves to share the commission paid to Landlord's Broker by Landlord. The provisions of this Section shall survive the expiration or earlier termination of the Lease.

ARTICLE TWENTY-THREE

MORTGAGEE PROTECTION

23.01 SUBORDINATION AND ATTORNMENT

This Lease is and shall be expressly subject and subordinate at all times to (1) any ground or underlying lease of the Real Property, now or hereafter existing, and all amendments, extensions, renewals and modifications to any such lease, and (ii) the lien of any mortgage or trust deed now or hereafter encumbering fee title to the Real Property and/or the leasehold estate under any such lease, and all amendments, extensions, renewals, replacements and modifications of such mortgage or trust deed and/or the obligation secured thereby, unless such ground lease or ground lessor, or mortgage, trust deed or Mortgagee, expressly provides or elects that the Lease shall be superior to such lease or mortgage or trust deed. If any such
mortgage or trust deed is foreclosed (including any sale of the Real Property pursuant to a power of sale), or if any such lease is terminated, upon request of the Mortgagor or ground lessor, as the case may be, Tenant shall attorn to the purchaser at the foreclosure sale or to the ground lessor under such lease, as the case may be, provided, however, that such purchaser or ground lessor shall not be (i) bound by any payment of Rent for more than one month in advance except payments in the nature of security for the performance by Tenant of its obligations under this Lease; (ii) subject to any offset, defense or damages arising out of a default of any obligations of any preceding Landlord; or (iii) bound by any amendment or modification of this Lease made without the written consent of the Mortgagor or ground lessor, or (iv) liable for any security deposits not actually received in cash by such purchaser or ground lessor. This subordination shall be self-operative and no further certificate or instrument of subordination need be required by any such Mortgagor or ground lessor. In confirmation of such subordination, however, Tenant shall execute promptly any reasonable certificate or instrument that Landlord, Mortgagor or ground lessor may request. Tenant hereby constitutes Landlord as Tenant's attorney-in-fact to execute such certificate or instrument for and on behalf of Tenant upon Tenants failure to do so within fifteen (15) days of a request to do so. Upon request by such successor in interest, Tenant shall execute and deliver reasonable instruments confirming the attornment provided for herein.

23.02 MORTGAGEE PROTECTION

Tenant agrees to give any Mortgagee or ground lessor, by registered or certified mail, a copy of any notice of default served upon the Landlord by Tenant, provided that prior to such notice Tenant has received notice (by way of service on Tenant of a copy of an assignment of rents and leases, or otherwise) of the address of such Mortgagee or ground lessor. Tenant further agrees that if Landlord shall have failed to cure such default within the time provided for in this Lease, then the Mortgagee or ground lessor shall have an additional thirty (30) days after receipt of notice thereof within which to cure such default or if such default cannot be cured within that time, then such additional notice time as may be necessary, if, within such thirty (30) days, any Mortgagee or ground lessor has commenced and is diligently pursuing the remedies necessary to cure such default (including commencement of foreclosure proceedings or other proceedings to acquire possession of the Real Property, if necessary to effect such cure). Such period of time shall be extended by any period within which such Mortgagee or ground lessor is prevented from commencing or pursuing such foreclosure proceedings or other proceedings to acquire possession of the Real Property by reason of Landlord’s bankruptcy. Until the time allowed as aforesaid for Mortgagee or ground lessor to cure such defaults has expired without Ours, Tenant shall have no right to, and shall not, terminate this Lease on account of default. This Lease may not be modified or amended so as to reduce the Rent or shorten the Term, or so as to adversely affect in any other respect to any material extent the rights of the Landlord, nor shall this Lease be canceled or surrendered, without the prior written consent, in each instance, of the ground lessor or the Mortgagee.

ARTICLE TWENTY-FOUR

NOTICES

(a) All notices, demands or requests provided for or permitted to be given pursuant to this Lease must be in writing and shall be personally delivered, sent by Federal Express or other reputable overnight courier service, or mailed by first class, registered or certified United States mail, return receipt requested, postage prepaid.

(b) All notices, demands or requests to be sent pursuant to this Lease shall be deemed to have been properly given or served by delivering or sending the same in accordance with this Section, addressed to the parties hereto at their respective addresses listed in Sections 1.01(2) and (3).

(c) Notices, demands or requests sent by mail or overnight courier service as described above shall be effective upon deposit in the mail or with such courier service. However, the time period in which a response to any such notice, demand or request must be given shall commence to run from (i) in the case of delivery by mail, the date of receipt on the return receipt of the notice, demand or request by the addressee thereof, or (ii) in the case of delivery by Federal Express or other overnight courier service, the date of acceptance of delivery by an employee, officer, director or partner of Landlord or Tenant. Rejection or other refusal to accept or the inability to deliver because of changed address of which no notice was given, as indicated by advice from Federal Express or other overnight courier service or by mail return receipt, shall be deemed to be receipt of notice, demand or request sent. Notices may also be served by personal service upon any officer, director or partner of Landlord or Tenant, and shall be effective upon such service.
(d) By giving to the other party at least thirty (30) days written notice thereof, either party shall have the right from time to time during the term of this Lease to change their respective addresses for notices, statements, demands and requests, provided such new address shall be within the United States of America.

ARTICLE TWENTY-FIVE

EXERCISE FACILITY

Tenant agrees to inform all employees of Tenant of the following: (i) the exercise facility is available for the use of the employees of tenants of the Project only and for no other person; (ii) use of the facility is at the risk of Tenant or Tenants employees, and all users must sign a release; (iii) the facility is unsupervised; and (iv) users of the facility must report any needed equipment maintenance or any unsafe conditions to the Landlord immediately. Landlord may discontinue providing such facility at Landlord’s sole option at any time without incurring any liability. As a condition to the use of the exercise facility, Tenant and each of Tenants employees that uses the exercise facility shall first sign a written release in form and substance acceptable to Landlord. Landlord may change the rules and/or hours of the exercise facility at any time, and Landlord reserves the right to deny access to the exercise facility to anyone due to misuse of the facility or noncompliance with rules and regulations of the facility. To the extent permitted by Law, Tenant hereby indemnifies, and agrees to protect, defend and hold the Indemnitees harmless, against any and all actions, claims, demands, liability, costs and expenses, including reasonable attorneys’ fees and expenses for the defense thereof, arising from use of the exercise facility in the Project by Tenant, Tenants employees or invitees, except to the extent due to the gross negligence or willful and wrongful act of Landlord or Indemnitees. In case of any action or proceeding brought against the Indemnitees by reason of any such claim, upon notice from Landlord, Tenant covenants to defend such action or proceeding by counsel chosen by Landlord, in Landlord’s sole discretion. Landlord reserves the right to settle, compromise or dispose of any and all actions, claims and demands related to the foregoing indemnity.

ARTICLE TWENTY-SIX

MISCELLANEOUS

26.01 LATE CHARGES

(a) The Monthly Base Rent, Rent Adjustments and Rent Adjustment Deposits shall be due when and as specifically provided above. Except for such payments and late charges described below, which late charge shall be due when provided below (without notice or demand), all other payments required hereunder to Landlord shall be paid within ten (10) days after Landlord’s demand therefor. All Rent and charges, except late charges, not paid when due shall bear interest from the date due until the date paid at the Default Rate in effect on the date such payment was due.

(b) In the event Tenant is more than five (5) days late in paying any installment of Rent due under this Lease, Tenant shall pay Landlord a late charge equal to five percent (5%) of the delinquent installment of Rent. The parties agree that (i) such delinquency will cause Landlord to incur costs and expenses not contemplated herein, the exact amount of which will be difficult to calculate, including the cost and expense that will be incurred by Landlord in processing each delinquent payment of rent by Tenant, and (ii) the amount of such late charge represents a reasonable estimate of such costs and expenses and that such late charge shall be paid to Landlord for each delinquent payment in addition to all Rent otherwise due hereunder. The parties further agree that the payment of late charges and the payment of interest provided for in subparagraph (a) above are distinct and separate from one another in that the payment of interest is to compensate Landlord for its inability to use the money improperly withheld by Tenant, while the payment of late charges is to compensate Landlord for its additional administrative expenses in handling and processing delinquent payments.

(c) Payment of interest at the Default Rate and/or of late charges shall not excuse or cure any default by Tenant under this Lease, nor shall the foregoing provisions of this Article or any such payments prevent Landlord from exercising any right or remedy available to Landlord upon Tenants failure to pay Rent when due, including the right to terminate this Lease.

26.02 NO JURY TRIAL; VENUE; JURISDICTION

Each party hereto (which includes any assignee, successor, heir-or personal representative of a party) shall not seek a jury trial, hereby waives trial by jury, and hereby further waives any
objection to venue in the County in which the Project is located, and agrees and consents to personal jurisdiction of the courts of
the State of California, in any action or proceeding or counterclaim brought by any party hereto against the other on any matter
whatsoever arising out of or in any way connected with this Lease, the relationship of Landlord and Tenant, Tenant’s use or
occupancy of the Premises, or any claim of injury or damage, or the enforcement of any remedy under any statute, emergency
or otherwise, whether any of the foregoing is based on this Lease or on tort law. No party will seek to consolidate any such
action in which a jury has been waived with any other action in which a jury trial cannot or has not been waived. It is the intention
of the parties that these provisions shall be subject to no exceptions. By execution of this Lease the parties agree that this
provision may be filed by any party hereto with the clerk or judge before whom any action is instituted, which filing shall
constitute the written consent to a waiver of jury trial pursuant to and in accordance with Section 631 of the California Code of
Civil Procedure. No party has in any way agreed with or represented to any other party that the provisions of this Section will not
be fully enforced in all instances. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

26.03 DEFAULT UNDER OTHER LEASE

It shall be a Default under this Lease if Tenant or any Affiliate holding any other lease with Landlord for premises in the Project
defaults under such lease and as a result thereof such lease is terminated or terminable.

26.04 OPTION

This Lease shall not become effective as a lease or otherwise until executed and delivered by both Landlord and Tenant. The
submission of the Lease to Tenant does not constitute a reservation of or option for the Premises, but when executed by Tenant
and delivered to Landlord, the Lease shall constitute an irrevocable offer by Tenant in effect for fifteen (15) days to lease the
Premises on the terms and conditions herein contained.

26.05 TENANT AUTHORITY

Tenant represents and warrants to Landlord that it has full authority and power to enter into and perform its obligations under this
Lease, that the person executing this Lease is fully empowered to do so, and that no consent or authorization is necessary from
any third party. Landlord may request that Tenant provide Landlord evidence of Tenants authority.

26.06 ENTIRE AGREEMENT

This Lease, the Exhibits and Riders attached hereto contain the entire agreement between Landlord and Tenant concerning the
Premises and there are no other agreements, either oral or written, and no other representations or statements, either oral or
written, on which Tenant has relied. This Lease shall not be modified except by a writing executed by Landlord and Tenant.

26.07 MODIFICATION OF LEASE FOR BENEFIT OF MORTGAGEE

If Mortgagee of Landlord requires a modification of this Lease which shall not result in any increased cost or expense to Tenant
or in any other material and adverse change in the rights and obligations of Tenant hereunder, then Tenant agrees that the
Lease may be so modified.

26.08 EXCULPATION

Tenant agrees, on its behalf and on behalf of its successors and assigns, that any liability or obligation of Landlord in connection
with this Lease shall only be enforced against Landlord’s equity interest in the Property up to a maximum of Five Million Dollars
($5,000,000.00) and in no event against any other assets of the Landlord, or Landlord’s officers or directors or partners, and that
any liability of Landlord with respect to this Lease shall be so limited and Tenant shall not be entitled to any judgment in excess
of such amount.

26.09 ACCORD AND SATISFACTION

No payment by Tenant or receipt by Landlord of a lesser amount than any installment or payment of Rent due shall be deemed
to be other than on account of the amount due, and no endorsement or statement on any check or any letter accompanying any
check or payment of Rent shall be deemed an accord and satisfaction, and Landlord may accept such check or payment without
prejudice to Landlord’s right to recover the balance of such installment or payment of Rent or pursue any other remedies
available to Landlord. No receipt of money by Landlord from Tenant after the termination of this Lease or Tenants right of
possession of the Premises shall reinstate, continue or extend the Term. Receipt or acceptance of payment from anyone other than Tenant, including an assignee of Tenant, is not a waiver of any breach of

Rider 2-38
Article Ten, and Landlord may accept such payment on account of the amount due without prejudice to Landlord’s right to pursue any remedies available to Landlord.

26.10 LANDLORD’S OBLIGATIONS ON SALE OF BUILDING

In the event of any sale or other transfer of the Building, Landlord shall be entirely freed and relieved of all agreements and obligations of Landlord hereunder accruing or to be performed after the date of such sale or transfer (provided, however, that Landlord shall not be freed and relieved of its obligation for reimbursement of the Security to Tenant unless Landlord has transferred to such transferee the unapplied balance of Tenant’s Security held by Landlord at such time), and any remaining liability of Landlord with respect to this Lease shall be limited to Five Million Dollars ($5,000,000.00) and Tenant shall not be entitled to any judgment in excess of such amount.

26.11 BINDING EFFECT

Subject to the provisions of Article Ten, this Lease shall be binding upon and inure to the benefit of Landlord and Tenant and their respective heirs, legal representatives, successors and permitted assigns.

26.12 CAPTIONS

The Article and Section captions in this Lease are inserted only as a matter of convenience and in no way define, limit, construe, or describe the scope or intent of such Articles and Sections.

26.13 TIME; APPLICABLE LAW; CONSTRUCTION

Time is of the essence of this Lease and each and all of its provisions. This Lease shall be construed in accordance with the Laws of the State of California. If more than one person signs this Lease as Tenant, the obligations hereunder imposed shall be joint and several. If any term, covenant or condition of this Lease or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term, covenant or condition to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each item, covenant or condition of this Lease shall be valid and be enforced to the fullest extent permitted by Law. Wherever the term “including” or “includes” is used in this Lease, it shall have the same meaning as if followed by the phrase “but not limited to”. The language in all parts of this Lease shall be construed according to its normal and usual meaning and not strictly for or against either Landlord or Tenant.

26.14 ABANDONMENT

In the event Tenant vacates or abandons the Premises but is otherwise in compliance with all the terms, covenants and conditions of this Lease, Landlord shall (i) have the right to enter into the Premises in order to show the space to prospective tenants, (ii) have the right to reduce the services provided to Tenant pursuant to the terms of this Lease to such levels as Landlord reasonably determines to be adequate services for an unoccupied premises and (iii) during the last six (6) months of the Term, have the right to prepare the Premises for occupancy by another tenant upon the end of the Term. Tenant expressly acknowledges that in the absence of written notice pursuant to Section 11.02(b) or pursuant to California Civil Code Section 1951.3 terminating Tenant’s right to possession, none of the foregoing acts of Landlord or any other act of Landlord shall constitute a termination of Tenant’s right to possession or an acceptance of Tenant’s surrender of the Premises, and the Lease shall continue in effect.

26.15 LANDLORD’S RIGHT TO PERFORM TENANTS DUTIES

If Tenant fails timely to perform any of its duties under this Lease, Landlord shall have the right (but not the obligation), to perform such duty on behalf and at the expense of Tenant without prior notice to Tenant, and all sums expended or expenses incurred by Landlord in performing such duty shall be deemed to be additional Rent under this Lease and shall be due and payable upon demand by Landlord.

26.16 SECURITY SYSTEM

Landlord shall not be obligated to provide or maintain any security patrol or security system. Landlord shall not be responsible for
the quality of any such patrol or system which may be provided hereunder or for damage or injury to Tenant, its employees, invitees or others due to the failure, action or inaction of such patrol or system.

26.17 NO LIGHT, AIR OR VIEW EASEMENTS

Rider 2-39
Any diminution or shutting off of light, air or view by any structure which may be erected on lands of or adjacent to the Project shall in no way affect this Lease or impose any liability on Landlord.

26.18 RECORDATION

Neither this Lease, nor any notice nor memorandum regarding the terms hereof, shall be recorded by Tenant. Any such unauthorized recording shall be a Default for which there shall be no cure or grace period. Tenant agrees to execute and acknowledge, at the request of Landlord, a memorandum of this Lease, in recordable form.

26.19 SURVIVAL

The waivers of the right of jury trial, the other waivers of claims or rights, the releases and the obligations of Tenant under this Lease to indemnify, protect, defend and hold harmless Landlord and/or Indemnitees shall survive the expiration or termination of this Lease, and so shall all other obligations or agreements which by their terms survive expiration or termination of the Lease.

26.20 EXHIBITS OR RIDERS

All exhibits, riders and/or addenda referred to in this Lease as an exhibit, addenda or rider hereto or attached hereto, are hereby incorporated into and made a part of this Lease.

IN WITNESS WHEREOF, this Lease has been executed as of the date set forth in Section 1.01(4) hereof.

TENANT: Genomic Health, Inc., a Delaware corporation
By /s/ Randal; Scott, PH.D.
Randal; Scott, PH.D.
Its Chairman and CEO
(Chairman of Board, President or Vice President)

By /s/ G. Bradley Cole
G. Bradley Cole
Its Executive Vice President and CFO
(Secretary, Assistant Secretary, CFO or Assistant Treasurer)

LANDLORD: Metropolitan Life Insurance Company, a New York corporation
By /s/ Greg Hill
Greg Hill
Print Name
Its Greg Hill
Print Name

Rider 2-40
EXHIBIT 10.4

FIRST AMENDMENT TO LEASE

This First Amendment to Lease ("Amendment") is entered into, and dated for reference purposes, as of October 4, 2019 (the "Execution Date") by and between METROPOLITAN LIFE INSURANCE COMPANY, a New York corporation ("Landlord"), and GENOMIC HEALTH, INC., a Delaware corporation ("Tenant"), with reference to the following facts ("Recitals"): A. Landlord and Tenant are the parties to that certain Lease, dated November 11, 2015, entered into by and between Tenant, as tenant and Landlord, as landlord (the "Existing Lease"), for certain "Premises" described therein containing approximately 31,166 rentable square feet of the Building (located at 501 Galveston Drive, Redwood City, California), all as more particularly described in the Existing Lease.

B. Landlord and Tenant desire to provide for (i) the extension of the Term of the Existing Lease; and (ii) other amendments of the Existing Lease as more particularly set forth below.

NOW, THEREFORE, in consideration of the foregoing, and of the mutual covenants set forth herein and of other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

Section 1. SCOPE OF AMENDMENT; DEFINED TERMS

. Except as expressly provided in this Amendment, the Existing Lease shall remain in full force and effect. Should any inconsistency arise between this Amendment and the Existing Lease as to the specific matters which are the subject of this Amendment, the terms and conditions of this Amendment shall control.

All capitalized terms used in this Amendment and not defined herein shall have the meanings set forth in the Existing Lease unless the context clearly requires otherwise; provided, however, that the term "Lease" as used herein and, from and after the Execution Date, in the Existing Lease shall refer to the Existing Lease as modified by this Amendment.

Section 2. EXTENSION OF TERM

. Landlord and Tenant acknowledge and agree that, notwithstanding any provision of the Existing Lease to the contrary, the current Term pursuant to the Existing Lease will expire on March 31, 2023, and that the Term of the Lease is hereby extended for the period of seventy-two (72) months (the "Extended Term") commencing on April 1, 2023 (the "Extension Commencement Date") and expiring March 31, 2029 (hereafter, the "Expiration Date" in lieu of the date provided in the Existing Lease), unless sooner terminated or extended pursuant to the terms of the Lease. Landlord and Tenant acknowledge and agree that the Option to Extend set forth in Section 5 of Rider 2 to the Existing Lease shall apply to the Extended Term, except that (i) the phrase "Extended Term" is inserted in place of reference to the "initial Term" in the Option to Extend, as amended, and (ii) the Expiration Date shall mean the Expiration Date of the Extended Term.

Section 3. MONTHLY BASE RENT FOR EXTENDED TERM

. Notwithstanding any provision of the Existing Lease to the contrary, commencing on the Extension Commencement Date and continuing through the Expiration Date of the Extended Term, the amount of Monthly Base Rent payable by Tenant for the Premises shall be as follows:

-1-
<table>
<thead>
<tr>
<th>Period from/to</th>
<th>Monthly Base Rent</th>
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<tr>
<td>April 1, 2023 to March 31, 2024</td>
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<tr>
<td>April 1, 2024 to March 31, 2025</td>
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<td>April 1, 2026 to March 31, 2027</td>
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<td>April 1, 2027 to March 31, 2028</td>
<td>$172,932.61</td>
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<tr>
<td>April 1, 2028 to March 31, 2029</td>
<td>$178,120.58</td>
</tr>
</tbody>
</table>
Section 4. **TENANT'S SHARE**

During the Extended Term, Tenant shall pay all additional Rent payable under the Lease, including Tenant's Share of Operating Expenses. Notwithstanding any provisions of the Existing Lease to the contrary, Tenant's Building Share shall continue to be 100%, Tenant's Phase Share shall continue to be 10.32%, and Tenant's Project Share shall continue to be 5.80%.

Section 5. **"AS IS" CONDITION**

(a) **Condition of Premises.** Notwithstanding any provision of the Existing Lease to the contrary, Tenant hereby leases for the Extended Term and accepts the Premises in its "AS IS" condition existing on the Execution Date, without any express or implied representations or warranties of any kind by Landlord, its brokers, manager or agents, or the employees of any of them regarding the Premises; and Landlord shall not have any obligation to construct or install any tenant improvements or alterations or to pay for any such construction or installation, except as expressly set forth in this Section 5.

(b) **Tenant Work Generally.** Landlord and Tenant acknowledge and agree that notwithstanding any provisions of the Existing Lease to the contrary: (a) Tenant may desire to do certain alterations, additions or improvements in connection with this extension of the Term, and for purposes of this Amendment any such work is referred to as "Tenant Work"; (b) all Tenant Work, if any, shall be done subject to and in compliance with this Amendment, and except to the extent modified by or inconsistent with the express provisions of this Amendment, pursuant to the provisions of Article Nine of the Existing Lease applicable to such Tenant Alterations; (c) without limiting the generality of any provisions of Article Nine, Tenant's selection of Tenant's space planner and/or architect ("Tenant's Architect") and Tenant's selection of a general contractor shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed; (d) all plans and specifications prepared by Tenant's space planner or architect shall be subject to review by Landlord's architect and to Landlord's prior written approval, which shall not be unreasonably withheld, conditioned or delayed beyond ten (10) business days with respect to any initial submissions, change orders, and any revisions thereto; (e) Tenant shall retain one or more engineers reasonably satisfactory to Landlord and licensed by the State of California to prepare structural, mechanical, and electrical working drawings and specifications for all Premises improvements, not included in, or requiring any changes to the HVAC, fire and/or life safety, mechanical and electrical work; (f) if the Tenant Work does not exceed the amount of the Allowance (as defined below), Tenant shall not be required to obtain a completion and lien indemnity bond for the Tenant Work; (g) such work, including all design, plan review, obtaining all approvals and permits, and construction shall be at Tenant's sole cost and expense (subject to reimbursement to the extent of the Allowance), including delivery to Landlord of plans and specifications of such Tenant Work (including an as-built mylar and digitized (to the extent available) set of as-built plans and specifications upon completion) to the extent such work is more than recarpeting and/or repainting, and (h) Tenant shall pay Landlord a fee ("Construction Monitoring Fee") for monitoring such design, construction and work by Tenant equal to two percent (2%) of the Allowance, which fee shall be paid by Landlord applying two percent (2%) of the Allowance in payment thereof.

(c) **Design & Construction Responsibility for any Tenant Work.** Tenant shall be responsible for the suitability for the Tenant's needs and business of the design and function of all Tenant Work and for its construction in compliance with (i) all laws, rules, ordinances, directions, regulations and requirements of all governmental authorities, agencies, offices, departments, bureaus and boards having jurisdiction thereof, (ii) all rules, orders, directions, regulations and requirements of the Pacific Fire Rating Bureau, or of any similar insurance body or bodies, and (iii) all reasonable rules and regulations of Landlord which have been provided to Tenant in
writing (collectively, referred to herein as "Laws"). Without limiting the generality of the foregoing, Landlord and Tenant acknowledge and agree that (a) such Laws include all building codes and regulations, Title 24, and the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12101 et. seq.) and regulations and guidelines promulgated thereunder, as all of the same may be amended and supplemented from time to time (collectively referred to herein as the "ADA"); and (b) in the event that any work by Tenant triggers any upgrades or modifications of existing improvements in the Premises required to comply with Law, Tenant shall also be responsible for such upgrades and modifications, at Tenant's sole cost and expense (subject to reimbursement by Landlord to the extent of the Allowance). Tenant, through Tenant's Architect, shall prepare all architectural plans and specifications, and engineering plans and specifications, for the real property improvements to be constructed by Tenant in the Premises in sufficient detail to be submitted to Landlord for approval, to the extent required pursuant to Article Nine of the Existing Lease and this Amendment, and to be submitted by Tenant for governmental approvals and building permits and to serve as the detailed construction drawings and specifications for the contractor, and shall include, among other things, all partitions, doors, heating, ventilating and air conditioning installation and distribution, ceiling systems, light fixtures, plumbing installations, electrical installations and outlets, telephone installations and outlets, any other installations required by Tenant, fire and life-safety systems, wall finishes and floor coverings, whether to be newly installed or requiring changes from the as-is condition of the Premises as of the date of execution of the Existing Lease. Tenant shall be responsible for the oversight, supervision and construction of all Tenant Work in compliance with this Existing Lease, including compliance with all Laws.

(d) Allowance: Amount; Reimbursable Costs & Payment. Allowance means an amount up to a maximum of Six Hundred Eighty-Five Thousand Six Hundred Fifty-Two and 00/100 Dollars ($685,652.00) to reimburse Tenant for the actual costs of design, engineering, plan review, obtaining all approvals and permits, and construction of Tenant Work in the Premises (including the Construction Monitoring Fee), and shall be payable as provided below. In no event shall the Allowance be used to reimburse Tenant for Tenant's FF&E (as such term is defined herein). For purposes of this Amendment, "Tenant's FF&E" shall mean Tenant's furniture, furnishings, telephone systems, computer systems, equipment, any other personal property or fixtures, and installation thereof, including without limitation, "Tenant's Personal Property" described on Exhibit "G" to the Existing Lease. The Allowance shall be paid to Tenant within thirty (30) days after the later of final completion of the Tenant Work and Landlord's receipt of (i) a certificate of completion prepared by Tenant's Architect, (ii) final as-built plans and specifications pursuant to this Amendment, (iii) full, final, unconditional lien releases, and (iv) reasonable substantiation of costs incurred by Tenant with respect to the Tenant Work. Tenant must prior to the date that is thirty-six (36) months from the Execution Date of this Amendment submit written application with the items required above for disbursement or reimbursement for any reimbursable costs out of the Allowance, and to the extent of any funds for which application has not been made prior to that date or if and to the extent that the reimbursable costs of the Tenant Work are less than the amount of the Allowance, then any balance remaining thereafter shall be retained by Landlord as its sole property and Landlord shall have no obligation or liability to Tenant with respect to such excess.

Section 6. TIME OF ESSENCE

Without limiting the generality of any other provision of the Existing Lease, time is of the essence to each and every term and condition of this Amendment.

Section 7. BROKERS

Notwithstanding any other provision of the Existing Lease to the contrary, Tenant represents that in connection with this Amendment it is represented by Kidder Mathews ("Tenant's Broker") and Landlord represents that in connection with this Amendment it is represented by Newmark Cornish & Carey ("Landlord's Broker"). Except for Tenant's Broker and Landlord's Broker identified below, Tenant has not dealt with any real estate broker, sales...
person, or finder in connection with this Amendment, and no such person initiated or participated in the negotiation of this Amendment. Except for Tenant's Broker and Landlord's Broker identified below, Landlord has not dealt with any real estate broker, sales person, or finder in connection with this Amendment, and no such person initiated or participated in the negotiation of this Amendment. Each party hereby indemnifies and agrees to protect, defend and hold the other party harmless from and against all claims, losses, damages, liability, costs and expenses (including, without limitation, attorneys' fees and expenses) by virtue of any broker, agent or other person claiming a commission or other form of compensation by virtue of alleged representation of, or dealings or discussions with, the indemnifying party with respect to the subject matter of this Amendment, except for Landlord's Broker and Tenant's Broker. Tenant is not obligated to pay or fund any amount to Landlord's Broker, and Landlord hereby agrees to pay such commission, if any, to which Landlord's Broker is entitled in connection with the subject matter of this Amendment pursuant to Landlord's separate written agreement with Landlord's Broker (which may be shared with Tenant's Broker to the extent that Tenant's Broker and Landlord's Broker have an agreement between themselves to share in such commission). The provisions of this Section shall survive the expiration or earlier termination of the Lease.

Section 8. ATTORNEYS' FEES

. Each party to this Amendment shall bear its own attorneys' fees and costs incurred in connection with the discussions preceding, negotiations for and documentation of this Amendment. Section 11.03 of the Lease is hereby deleted in its entirety and of no further force and effect.

Section 9. EFFECT OF HEADINGS; RECITALS; EXHIBITS

. The titles or headings of the various parts or sections hereof are intended solely for convenience and are not intended and shall not be deemed to or in any way be used to modify, explain or place any construction upon any of the provisions of this Amendment. Any and all Recitals set forth at the beginning of this Amendment are true and correct and constitute a part of this Amendment as if they had been set forth as covenants herein. Exhibits, schedules, plats and riders hereto which are referred to herein are a part of this Amendment.

Section 10. ENTIRE AGREEMENT; AMENDMENT

. This Amendment taken together with the Existing Lease, together with all exhibits, schedules, riders and addenda to each, constitutes the full and complete agreement and understanding between the parties hereto and shall supersede all prior communications, representations, understandings or agreements, if any, whether oral or written, concerning the subject matter contained in this Amendment and the Existing Lease, as so amended, and no provision of the Lease as so amended may be modified, amended, waived or discharged, in whole or in part, except by a written instrument executed by all of the parties hereto.

Section 11. OFAC

. Landlord advises Tenant hereby that the purpose of this Section is to provide to the Landlord information and assurances to enable Landlord to comply with the law relating to OFAC.

Tenant hereby represents, warrants and covenants to Landlord, either that (i) Tenant is regulated by the SEC, FINRA or the Federal Reserve (a "Regulated Entity") or (ii) neither Tenant nor any person or entity that directly or indirectly (a) controls Tenant or (b) has an ownership interest in Tenant of twenty-five percent (25%) or more, appears on the list of Specially Designated Nationals and Blocked Persons ("OFAC List") published by the Office of Foreign Assets Control ("OFAC") of the U.S. Department of the Treasury.

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If, in connection with the Lease, there is one or more Guarantors of Tenant's obligations under the Lease, then Tenant further represents, warrants and covenants either that (i) any such Guarantor is a Regulated Entity or (ii) neither Guarantor nor any person or entity that directly or indirectly (a) controls such Guarantor or (b) has an ownership interest in such Guarantor of twenty-five percent (25%) or more, appears on the OFAC List.

Tenant covenants that during the term of the Lease to provide to Landlord information reasonably requested by Landlord including without limitation, organizational structural charts and organizational documents which Landlord may deem to be necessary ("Tenant OFAC Information") in order for Landlord to confirm Tenant's continuing compliance with the provisions of this Section. Tenant represents and warrants that the Tenant OFAC Information it has provided or to be provided to Landlord or Landlord's Broker in connection with the execution of this Amendment is true and complete.

Section 12. RATIFICATION

Tenant represents to Landlord that: (a) the Existing Lease is in full force and effect and has not been modified except as provided by this Amendment; (b) as of the Execution Date, to Tenant's current, actual knowledge, there are no uncured defaults or unfulfilled obligations on the part of Landlord or Tenant; and (c) Tenant is currently in possession of the entire Premises as of the Execution Date, and neither the Premises, nor any part thereof, is occupied by any subtenant or other party other than Tenant.

Section 13. AUTHORITY

Each party represents and warrants to the other that it has full authority and power to enter into and perform its obligations under this Amendment, that the person executing this Amendment is fully empowered to do so, and that no consent or authorization is necessary from any third party. Landlord may request that Tenant provide Landlord evidence of Tenant's authority.

Section 14. DISCLOSURE REGARDING CERTIFIED ACCESS SPECIALIST

Pursuant to California Civil Code Section 1938, Landlord hereby notifies Tenant that as of the date of this Amendment, the Premises have not undergone inspection by a "Certified Access Specialist" ("CASp") to determine whether the Premises meet all applicable construction-related accessibility standards under California Civil Code Section 55.53. Landlord hereby discloses pursuant to California Civil Code Section 1938 as follows: "A Certified Access Specialist (CASp) can inspect the subject premises and determine whether the subject premises comply with all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises." Landlord and Tenant hereby acknowledge and agree that in the event that Tenant elects to perform a CASp inspection of the Premises hereunder (the "Inspection"), such Inspection shall be (a) performed at Tenant's sole cost and expense, (b) limited to the Premises and (c) performed by a CASp who has been approved or designated by Landlord prior to the Inspection. Any Inspection must be performed in a manner which minimizes the disruption of business activities in the Building, and at a time reasonably approved by Landlord. Landlord reserves the right to be present during the Inspection. Tenant agrees to: (i) promptly provide to Landlord a copy of the report or certification prepared by the CASp inspector upon request (the "Report"), and (ii) keep the information contained in the Report confidential, except to the extent required by Law, or to the extent disclosure is needed in order to complete any necessary modifications or improvements required to comply with all applicable accessibility standards under state latter.
or federal Law, as well as any other repairs, upgrades, improvements, modifications or alterations required by the Report or that may be otherwise required to comply with applicable Laws or accessibility requirements (the "Access Improvements"). If Tenant performs an Inspection, Tenant shall be solely responsible for the cost of Access Improvements to the Premises or the Building necessary to correct any such violations of construction-related accessibility standards identified by such Inspection as required by Law, which Access Improvements may, at Landlord's option, be performed in whole or in part by Landlord at Tenant's expense, payable as Additional Rent within ten (10) days following Landlord's demand.

Section 15. ENERGY UTILITY USAGE

. If Tenant is billed directly by a public utility with respect to Tenant's energy usage at the Premises, then, within ten (10) business days' following Tenant's receipt of Landlord's written request therefor, Tenant shall provide monthly energy utility usage for the Premises to Landlord for the period of time requested by Landlord (in electronic or paper format) or, at Landlord's option, provide any written authorization or other documentation required for Landlord to request information regarding Tenant's energy usage with respect to the Premises directly from the applicable utility company.

Section 16. NO CANNABIS

. Tenant shall not bring upon the Premises or any portion of the [Project] or use the Premises or permit the Premises or any portion thereof to be used for the growing, Manufacturing, administration, distribution (including without limitation, any retail sales), possession, use or consumption of any cannabis, marijuana or cannabinoid product or compound, regardless of the legality or illegality of the same.

Section 17. COUNTERPARTS

. This Amendment may be executed in duplicates or counterparts, or both, and such duplicates or counterparts together shall constitute but one original of the Amendment, and the signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. Each duplicate and counterpart shall be equally admissible in evidence, and each original shall fully bind each party who has executed it.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first set forth above.

TENANT: GENOMIC HEALTH, INC.,
   a Delaware corporation
   By: /s/ Kimberly Popovits
   Print Name: Kimberly Popovits
   Title: CEO
   (Chairman of Board, President or Vice President)
   By: /s/ Frederic Pla

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LANDLORD:  METROPOLITAN LIFE INSURANCE COMPANY,

a New York corporation

By: MetLife Investment Management, LLC,
a Delaware limited liability company,
its investment manager

By: /s/ Leland Low
Print name: Leland Low
Its: Authorized Signatory and Director

Print Name: Frederic Pla

Title: COO
(Secretary, Assistant Secretary, CFO or Assistance Treasurer)
LEASE

BETWEEN

METROPOLITAN LIFE INSURANCE COMPANY (LANDLORD)

AND

GENOMIC HEALTH, INC. (TENANT)

SEAPORT CENTRE

Redwood City, California
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LEASE

ARTICLE ONE

BASIC LEASE PROVISIONS

1.01 BASIC LEASE PROVISIONS

In the event of any conflict between these Basic Lease Provisions and any other Lease provision, such other Lease provision shall control.

(1) BUILDING AND ADDRESS: Building Number 7, located in Phase I ("Tenant's Phase") of Seaport Centre. As of the Date of Lease, the Building has a street address of 501 Galveston Drive, Redwood City, California 94063

(2) LANDLORD AND ADDRESS:

    Metropolitan Life Insurance Company,
    a New York corporation

    Notices to Landlord shall be addressed:

        Metropolitan Life Insurance Company
    c/o Seaport Centre Manager
    701 Chesapeake Drive
    Redwood City, CA 94063

    with copies to the following:

        Metropolitan Life Insurance Company
    425 Market Street, Suite 1050
    San Francisco, CA 94105
    Attention: Director, EIM

        and

        Metropolitan Life Insurance Company
    425 Market Street, Suite 1050
    San Francisco, CA 94105
    Attention: Associate General Counsel

(3) TENANT; CURRENT ADDRESS & TAX ID:

    (a) Name: Genomic Health, Inc. ("Genomic Health")
    (b) State of incorporation: a Delaware corporation
    (c) Tax Identification Number: 77-0552594

    Tenant shall notify Landlord of any change in the foregoing.

    Notices to Tenant shall be addressed:

        Genomic Health, Inc.
    301 Penobscot Drive
    Redwood City, CA 94063
    Attention: Chief Financial Officer
DATE OF LEASE: as of November, 2015  

LEASE TERM: Eighty-one (81) months  

COMMENCEMENT DATE: The date which is the earlier to occur of (i) the date that Tenant first commence business operations in the Premises, or (ii) July 1, 2016.  

EXPIRATION DATE: Eighty-one (81) months after the Commencement Date.  

MONTHLY BASE RENT (initial monthly installment due upon Tenant's execution): 

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<th>Period from/to</th>
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<tr>
<td>Months 01 — 6*</td>
<td>$86,641.48</td>
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<tr>
<td>Months 7 — 18</td>
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<td>Months 19 — 30</td>
<td>$91,917.95</td>
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<td>$100,441.22</td>
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<td>Months 67 — 78</td>
<td>$103,454.46</td>
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<td>Months 79 — 81</td>
<td>$106,558.09</td>
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RENT ADJUSTMENT DEPOSIT: The Rent Adjustment Deposit (at the initial monthly rate, until further notice) shall be Sixteen Thousand Two Hundred Six and 32/100 Dollars ($16,206.32) and is due upon Tenant's execution.  

RENTABLE AREA OF THE PREMISES: 31,166 square feet  

RENTABLE AREA OF THE BUILDING: 31,166 square feet  

RENTABLE AREA OF THE PHASE: 301,852 square feet  

RENTABLE AREA OF THE PROJECT: 537,444 square feet  

SECURITY: The cash and/or Letter of Credit in the amount of Three Hundred Nineteen Thousand Six Hundred Seventy-Four and 27/100 ($319,674.27) (and any proceeds of the Letter of Credit drawn and held by Landlord) as provided in Article 5.  

SUITE NUMBER &/OR ADDRESS OF PREMISES: 501 Galveston Drive, Redwood City, CA 94063  

TENANT'S SHARE:  

<table>
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<th>Tenant's Building Share</th>
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<tr>
<td>Tenant's Phase Share</td>
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TENANT'S USE OF PREMISES: General office use; biotechnology/pharmaceutical research and development, assembly, biotechnical or pharmaceutical manufacturing, and warehousing.
1.02 ENUMERATION OF EXHIBITS & RIDER(S)

The Exhibits and Rider(s) set forth below and attached to this Lease are incorporated in this Lease by this reference:

EXHIBIT A Plan of Premises
EXHIBIT B Workletter Agreement
EXHIBIT C Site Plan of Project
EXHIBIT D Permitted Hazardous Material
EXHIBIT E Form of Letter of Credit Acceptable from Silicon Valley Bank
EXHIBIT F Fair Market Value
EXHIBIT G Tenant's Personal Property
EXHIBIT H Form of Letter of Credit
RIDER 1 Commencement Date Agreement
RIDER 2 Additional Provisions

1.03 DEFINITIONS

For purposes hereof, the following terms shall have the following meanings:

ADJUSTMENT YEAR: The applicable calendar year or any portion thereof after the Commencement Date of this Lease for which a Rent Adjustment computation is being made.

AFFILIATE: Any Person (as defined below) which is controlled by, controls, or is under common control with Tenant. The word Person means an individual, partnership, trust, corporation, limited liability company, firm or other entity. For purposes of this definition, the word "control," means, with respect to a Person that is a corporation or a limited liability company, the right to exercise, directly or indirectly, more than sixty percent (60%) of the voting rights attributable to the shares or membership interests of the controlled Person and, with respect to a Person that is not a corporation, the possession, directly or indirectly, of the power at all times to direct or cause the direction of the management of the controlled Person.

BUILDING: The building in which the Premises is located, as specified in Section 1.01(1).

BUILDING OPERATING EXPENSES: Those Operating Expenses described in Section 4.01.

COMMENCEMENT DATE: The date specified in Section 1.01(6).

COMMON AREAS: All areas of the Project made available by Landlord from time to time for the general common use or benefit of the tenants of the Building or Project, and their employees and invitees, or the public, as such areas currently exist and as they may be changed from time to time.

DECORATION: Tenant Alterations which do not require a building permit and which do not affect the facade or roof of the Building, or involve any of the structural elements of the Building, or involve any of

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the Building's systems, including its electrical, mechanical, plumbing, security, heating, ventilating, air-conditioning, communication, and fire and life safety systems.

DEFAULT RATE: Two (2) percentage points above the rate then most recently announced by Bank of America N.T. & S.A. at its San Francisco main office as its corporate base lending rate, from time to time announced, but in no event higher than the maximum rate permitted by Law.

DELIVERY DATE: The date for Landlord's delivery to Tenant of possession of the Premises, if different from the Commencement Date, as provided in Rider 2.

ENVIRONMENTAL LAWS: All Laws governing the use, storage, disposal or generation of any Hazardous Material or pertaining to environmental conditions on, under or about the Premises or any part of the Project, including the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended (42 U.S.C. Section 9601 et seq.), and the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. Section 6901 et seq.)

EXPIRATION DATE: The date specified in Section 1.01(7) unless changed by operation of Article Two or Rider 2.

FORCE MAJERE: Any accident, casualty, act of God, war or civil commotion, strike or labor troubles, or any cause whatsoever beyond the reasonable control of Landlord, including water shortages, energy shortages or governmental preemption in connection with an act of God, a national emergency, or by reason of Law, or by reason of the conditions of supply and demand which have been or are affected by act of God, war or other emergency.

HAZARDOUS MATERIAL: Such substances, material and wastes which are or become regulated under any Environmental Law; or which are classified as hazardous or toxic or medical waste or biohazardous waste under any Environmental Law; and explosives, firearms and ammunition, flammable material, radioactive material, asbestos, polychlorinated biphenyls and petroleum and its byproducts.

INDEMNITEES: Collectively, Landlord, any Mortgagee or ground lessor of the Property, the property manager and the leasing manager for the Property and their respective directors, officers, agents and employees.

LAND: The parcel(s) of real estate on which the Building and Project are located.

LANDLORD WORK: The construction or installation of improvements to be furnished by Landlord, if any, specifically described in the Workletter attached hereto.

LAWS OR LAW: All laws, ordinances, rules, regulations, other requirements, orders, rulings or decisions adopted or made by any governmental body, agency, department or judicial authority having jurisdiction over the Property, the Premises or Tenant's activities at the Premises and any covenants, conditions or restrictions of record which affect the Property.

LEASE: This instrument and all exhibits and riders attached hereto, as may be amended from time to time.

LEASE YEAR: The twelve month period beginning on the first day of the first month following the Commencement Date (unless the Commencement Date is the first day of a calendar month in which case beginning on the Commencement Date), and each subsequent twelve month, or shorter, period until the Expiration Date.

MONTHLY BASE RENT: The monthly rent specified in Section 1.01(8).
MORTGAGEE: Any holder of a mortgage, deed of trust or other security instrument encumbering the Property.

NATIONAL HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day and other holidays recognized by the Landlord and the janitorial and other unions servicing the Building in accordance with their contracts.

OPERATING EXPENSES: All Taxes, costs, expenses and disbursements of every kind and nature which Landlord shall pay or become obligated to pay in connection with the ownership, management, operation, maintenance, replacement and repair of the Property (including the amortized portion of any capital expenditure or improvement, together with interest thereon, expenses of changing utility service providers, and any dues, assessments and other expenses pursuant to any covenants, conditions and restrictions, or any reciprocal easements, or any owner's association now or hereafter affecting the Project; provided however that with respect to any expenses, dues, assessments and other expenses pursuant to any covenants, conditions and restrictions, or any reciprocal easements, or any owner's association hereafter affecting the Project, then such costs and expenses shall only be deemed to be Operating Expenses to the extent that such costs or expenses could otherwise be deemed to be Operating Expenses pursuant to the provisions set forth in this section). Operating Expenses shall be allocated among the categories of Project Operating Expenses, Building Operating Expenses or Phase Operating Expenses as provided in Article Four. If any Operating Expense relates to more than one calendar year, such expense shall be proportionately allocated among such related calendar years. Operating Expenses shall include the following, by way of illustration only and not limitation: (1) all Taxes; (2) all insurance premiums and other costs (including deductibles), including the cost of rental insurance; (3) all license, permit and inspection fees; (4) all costs of utilities, fuels and related services, including water, sewer, light, telephone, power and steam connection, service and related charges; (5) all costs to repair, maintain and operate heating, ventilating and air conditioning systems, including preventive maintenance incurred by Landlord, if any; (6) all janitorial, landscaping and security services; (7) all wages, salaries, payroll taxes, fringe benefits and other labor costs, including the cost of workers' compensation and disability insurance; (8) all costs of operation, maintenance and repair of all parking facilities and other common areas; (9) all supplies, materials, equipment and tools; (10) dues, assessments and other expenses pursuant to any covenants, conditions and restrictions, or any reciprocal easements, or any owner's association now or hereafter affecting the Project; (11) modifications to the Building or the Project occasioned by Laws now or hereafter in effect, but only as amortized over the useful life of the capital item as reasonably determined by Landlord; (12) the total charges of any independent contractors employed in the care, operation, maintenance, repair, leasing and cleaning of the Project, including landscaping, roof maintenance, and repair, maintenance and monitoring of life-safety systems, plumbing systems, electrical wiring and Project signage; (13) the cost of accounting services necessary to compute the rents and charges payable by tenants at the Project; (14) exterior window and exterior wall cleaning and painting; (15) managerial and administrative expenses; (16) all costs in connection with the exercise facility at the Project; (17) all costs and expenses related to Landlord's retention of consultants in connection with the routine review, inspection, testing, monitoring, analysis and control of Hazardous Material, and retention of consultants in connection with the clean-up of Hazardous Material (to the extent not recoverable from a particular tenant of the Project), and all costs and expenses related to the implementation of recommendations made by such consultants concerning the use, generation, storage, manufacture, production, storage, release, discharge, disposal or clean-up of Hazardous Material on, under or about the Premises or the Project (to the extent not recoverable from a particular tenant of the Project); (18) all capital improvements made for the purpose of reducing or controlling other Operating Expenses, and all other capital expenditures, but only as amortized over the useful life of such capital improvement as reasonably determined by Landlord, together with interest on the unamortized portion; (19) all property management costs and fees, including all costs in connection with the Project property management office; and (20) all fees or other charges incurred in conjunction with voluntary or involuntary membership in any energy conservation, air quality, environmental, traffic management or similar organizations. Operating Expenses shall not include: (a) costs of alterations of space to be occupied by new or existing tenants of the Project; (b) depreciation charges; (c) interest and

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principal payments on loans (except for loans for capital expenditures or improvements which Landlord is allowed to include in Operating Expenses as provided above); (d) ground rental payments; (e) real estate brokerage and leasing commissions; (f) advertising and marketing expenses; (g) costs of Landlord reimbursed by insurance proceeds; (h) costs for which the Landlord is reimbursed by any other tenant or occupant of the Building (other than payments comparable to Rent Adjustments hereunder) or by any tenant's insurance carrier or by anyone else, and electric power costs for which any tenant directly contracts with the local public service company; (i) expenses incurred in negotiating leases of other tenants in the Project or enforcing lease obligations of other tenants in the Project; (j) Landlord's property manager's corporate general overhead or corporate general administrative expenses; (k) the wages and benefits of any employee who does not devote substantially all of his or her employed time to the Building, Project or Phase, unless such wages and benefits are prorated to reflect time spent on operation and managing the Building, Project or Phase; (l) Landlord's corporate general overhead or corporate general administrative expenses associated with the operation of the business of the entity which constitutes the Landlord, as the same are distinguished from the costs of operation of the Building, Project or Phase; (m) executives' salaries; (n) any bad debt loss, rent loss, or reserves for bad debts or rent loss; (o) costs of Landlord's charitable or political contributions; (p) the costs of any Tenant Work (as defined in the Workletter), (q) costs incurred in connection with Hazardous Materials to the extent such Hazardous Materials were present on the Project prior to the Delivery Date, and (r) the costs of maintaining compliance of the Common Areas with all applicable Laws to the extent required by a governmental authority with jurisdiction (except to the extent such compliance is triggered by the application for any permit or approval required in connection with any of the Tenant Additions or is the responsibility of Tenant under this Lease, in which events the Tenant shall be responsible for the costs of such compliance).

PHASE: Phase means any individual Phase of the Project, as more particularly described in the definition of Project.

PHASE OPERATING EXPENSES: Those Operating Expenses described in Section 4.01.

PREMISES: The Premises consists of the entire Building, consisting of 31,166 square feet of Rentable Area as depicted on Exhibit A attached hereto.

PROJECT or PROPERTY: As of the date hereof, the Project is known as Seaport Centre and consists of those buildings (including the Building) whose general location is shown on the Site Plan of the Project attached as Exhibit C, located in Redwood City, California, associated vehicular and parking areas, landscaping and improvements, together with the Land, any associated interests in real property, and the personal property, fixtures, machinery, equipment, systems and apparatus located in or used in conjunction with any of the foregoing. The Project may also be referred to as the Property. As of the date hereof, the Project is divided into Phase I and Phase II, which are generally designated on Exhibit C, each of which may individually be referred to as a Phase. Landlord reserves the right from time to time to add or remove buildings, areas and improvements to or from a Phase or the Project, or to add or remove a Phase to or from the Project. In the event of any such addition or removal which affects Rentable Area of the Project or a Phase, Landlord shall make a corresponding recalculation and adjustment of any affected Rentable Area and Tenant's Share.

PROJECT OPERATING EXPENSES: Those Operating Expenses described in Section 4.01.

REAL PROPERTY: The Property excluding any personal property.

RENT: Collectively, Monthly Base Rent, Rent Adjustments and Rent Adjustment Deposits, and all other charges, payments, late fees or other amounts required to be paid by Tenant under this Lease.

RENT ADJUSTMENT: Any amounts owed by Tenant for payment of Operating Expenses. The Rent Adjustments shall be determined and paid as provided in Article Four.
RENT ADJUSTMENT DEPOSIT: An amount equal to Landlord's estimate of the Rent Adjustment attributable to each month of the applicable Adjustment Year. On or before the Commencement Date and the beginning of each subsequent Adjustment Year or with Landlord's Statement (defined in Article Four), Landlord may estimate and notify Tenant in writing of its estimate of Operating Expenses, including Project Operating Expenses, Building Operating Expenses and Phase Operating Expenses, and Tenant's Share of each, for the applicable Adjustment Year. The Rent Adjustment Deposit applicable for the calendar year in which the Commencement Date occurs shall be the amount, if any, specified in Section 1.01(9). Nothing contained herein shall be construed to limit the right of Landlord from time to time during any calendar year to revise its estimates of Operating Expenses and to notify Tenant in writing thereof and of revision by prospective adjustments in Tenant's Rent Adjustment Deposit payable over the remainder of such year. The last estimate by Landlord shall remain in effect as the applicable Rent Adjustment Deposit unless and until Landlord notifies Tenant in writing of a change.

RENTABLE AREA OF THE BUILDING: The amount of square footage set forth in Section 1.01(11)

RENTABLE AREA OF THE PHASE: The amount of square footage set forth in Section 1.01(12)

RENTABLE AREA OF THE PREMISES: The amount of square footage set forth in Section 1.01(10).

RENTABLE AREA OF THE PROJECT: The amount of square footage set forth in Section 1.01(13), which represents the sum of the rentable area of all space intended for occupancy in the Project.

SECURITY: The cash and/or Letter of Credit specified in Section 1.01, if any, paid or delivered to Landlord as security for Tenant's performance of its obligations under this Lease, and any proceeds of the Letter of Credit drawn and held by Landlord, all as more particularly provided in Article Five.

SUBSTANTIALLY COMPLETE: The completion of the Landlord Work or Tenant Work, as the case may be, except for minor insubstantial details of construction, decoration or mechanical adjustments which remain to be done.

TAXES: All federal, state and local governmental taxes, assessments (including assessment bonds) and charges of every kind or nature, whether general, special, ordinary or extraordinary, which Landlord shall pay or become obligated to pay because of or in connection with the ownership, leasing, management, control or operation of the Property or any of its components (including any personal property used in connection therewith), which may also include any rental or similar taxes levied in lieu of or in addition to general real and/or personal property taxes. For purposes hereof, Taxes for any year shall be Taxes which are assessed for any period of such year, whether or not such Taxes are billed and payable in a subsequent calendar year. There shall be included in Taxes for any year the amount of all fees, costs and expenses (including reasonable attorneys' fees) paid by Landlord during such year in seeking or obtaining any refund or reduction of Taxes. Taxes for any year shall be reduced by the net amount of any tax refund received by Landlord attributable to such year. If a special assessment payable in installments is levied against any part of the Property, Taxes for any year shall include only the installment of such assessment and any interest payable or paid during such year. Taxes shall not include any federal or state inheritance, general income, gift or estate taxes, except that if a change occurs in the method of taxation resulting in whole or in part in the substitution of any such taxes, or any other assessment, for any Taxes as above defined, such substituted taxes or assessments shall be included in the Taxes.

TENANT ADDITIONS: Collectively, Landlord Work, Tenant Work and Tenant Alterations. Tenant's Personal Property (as set forth in Exhibit G hereto) shall not be deemed to be included in the definition of Tenant Additions.

TENANT ALTERATIONS: Any alterations, improvements, additions, installations or construction in or to the Premises or any Real Property systems serving the Premises done or caused to be done by Tenant
after the date hereof, whether prior to or after the Commencement Date (including Tenant Work, but excluding Landlord Work).

TENANT DELAY: Any event or occurrence which delays the Substantial Completion of the Landlord Work which is caused by or is described as follows:

(i) special work, changes, alterations or additions requested or made by Tenant in the design or finish in any part of the Premises after approval of the plans and specifications (as described in the Workletter);

(ii) Tenant's delay in submitting plans, supplying information, approving plans, specifications or estimates, giving authorizations or otherwise;

(iii) failure to approve and pay for such work as Landlord undertakes to complete at Tenant's expense;

(iv) the performance or completion by Tenant or any person engaged by Tenant of any work in or about the Premises; or

(v) failure to perform or comply with any obligation or condition binding upon Tenant pursuant to the Workletter including the failure to approve and pay for such Landlord Work or other items if and to the extent the Workletter provides they are to be approved or paid by Tenant.

TENANT’S FF&E: The property of Tenant described in Section 5 of the Workletter.

TENANT’S PERSONAL PROPERTY: Tenant's property described on Exhibit G hereto.

TENANT WORK: All work installed or furnished to the Premises by Tenant in connection with Tenant's initial occupancy pursuant to Rider 2 and the Workletter.

TENANT’S BUILDING SHARE: The share as specified in Section 1.01(16) and Section 4.01.

TENANT’S PHASE: The Phase in which the Premises is located, as indicated in Section 1.01(1).

TENANT’S PHASE SHARE: The share as specified in Section 1.01(16) and Section 4.01.

TENANT’S PROJECT SHARE: The share as specified in Section 1.01(16) and Section 4.01.

TENANT’S SHARE: Shall mean collectively, Tenant's respective shares of the respective categories of Operating Expenses, as provided in Section 1.01(16) and Section 4.01.

TERM: The term of this Lease commencing on the Commencement Date and expiring on the Expiration Date.

TERMINATION DATE: The Expiration Date or such earlier date as this Lease terminates or Tenant's right to possession of the Premises terminates.

WORKLETTER: The Agreement regarding the completion of Tenant Work and Landlord Work, if any, set forth in Rider 2 and Exhibit B hereto.

ARTICLE TWO

PREMISES, TERM, FAILURE TO GIVE POSSESSION, COMMON AREAS AND PARKING

2.01 LEASE OF PREMISES
Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the Premises for the Term and upon the terms, covenants and conditions provided in this Lease.

2.02 TERM (See Rider 2)

2.03 FAILURE TO GIVE POSSESSION (See Rider 2)

2.04 AREA OF PREMISES

Landlord and Tenant agree that for all purposes of this Lease the Rentable Area of the Premises, the Rentable Area of the Building, the Rentable Area of the Phase and the Rentable Area of the Project as set forth in Article One are controlling, and are not subject to revision after the date of this Lease, except as otherwise provided herein.

2.05 CONDITION OF PREMISES (See Rider 2)

2.06 COMMON AREAS & PARKING

(a) Right to Use Common Areas. Tenant shall have the non-exclusive right, in common with others, to the use of any common entrances, ramps, drives and similar access and serviceways and other Common Areas in the Project. The rights of Tenant hereunder in and to the Common Areas shall at all times be subject to the rights of Landlord and other tenants and owners in the Project who use the same in common with Tenant, and it shall be the duty of Tenant to keep all the Common Areas free and clear of any obstructions created or permitted by Tenant or resulting from Tenant's operations. Tenant shall not use the Common Areas or common facilities of the Building or the Project, including the Building's electrical room, parking lot or trash enclosures, for storage purposes. Nothing herein shall affect the right of Landlord at any time to remove any persons not authorized to use the Common Areas or common facilities from such areas or facilities or to prevent their use by unauthorized persons.

(b) Changes in Common Areas. Landlord reserves the right, at any time and from time to time to (i) make alterations in or additions to the Common Areas or common facilities of the Project, including constructing new buildings or changing the location, size, shape or number of the driveways, entrances, parking spaces, parking areas, loading and unloading areas, landscape areas and walkways, (ii) designate property to be included in or eliminate property from the Common Areas or common facilities of the Project, (iii) close temporarily any of the Common Areas or common facilities of the Project for maintenance purposes, and (iv) use the Common Areas and common facilities of the Project while engaged in making alterations in or additions and repairs to the Project; provided, however, that (x) such changes do not materially adversely affect Tenant's use of the Premises or increase Tenant's costs hereunder, and (y) reasonable access to the Premises and parking at or near the Project remains available.

(c) Parking. During the Term, Tenant shall have the right to use the number of Parking Spaces specified in Section 1.01(18) for parking on an unassigned basis on that portion of the Project designated by Landlord from time to time for parking. Tenant acknowledges and agrees that the parking spaces in the Project's parking facility may include a mixture of spaces for compact vehicles as well as full-size passenger automobiles, and that Tenant shall not use parking spaces for vehicles larger than the striped size of the parking spaces. Tenant shall comply with any and all parking rules and regulations if and as from time to time established by Landlord. Tenant shall not allow any vehicles using Tenant's parking privileges to be parked, loaded or unloaded except in accordance with this Section, including in the areas and in the manner designated by Landlord for such activities. If any vehicle owned or operated by Tenant or any Tenant Parties (as defined in Article Seven) is using the parking or loading areas contrary to any provision of this Section, Landlord shall have the right, in addition to all other rights and remedies of Landlord under this Lease, to remove or tow away the vehicle without prior notice to Tenant.
and the cost thereof shall be paid to Landlord within ten (10) business days after notice from Landlord to Tenant.

ARTICLE THREE

RENT

Tenant agrees to pay to Landlord via wire transfer in accordance with instructions set forth below (as modified by Landlord from time to time), or to such other persons, or at such other places or in such manner designated by Landlord, without any prior demand therefor in immediately available funds and without any deduction or offset whatsoever, Rent, including Monthly Base Rent and Rent Adjustments in accordance with Article Four, during the Term. Monthly Base Rent shall be paid monthly in advance on the first day of each month of the Term, except that the first installment of Monthly Base Rent shall be paid by Tenant to Landlord concurrently with execution of this Lease by means of Tenant's check payable to the order of Metropolitan Life Insurance Company. Monthly Base Rent shall be prorated for partial months within the Term. Unpaid Rent shall bear interest at the Default Rate from the date due until paid. Tenant's covenant to pay Rent shall be independent of every other covenant in this Lease. Until further notice to Tenant, Rent paid by wire transfer shall be wired to:

Bank: JP Morgan Chase Bank, N.A.
Address: PO Box 659754 San Antonio, TX 78265-9754
Account Name: MLIC Seaport Centre II CBRE
Account number: 9132219065
ACH ABA #: 021000021

ARTICLE FOUR

OPERATING EXPENSES, RENT ADJUSTMENTS AND PAYMENTS

4.01 TENANT'S SHARE OF OPERATING EXPENSES

Tenant shall pay Tenant's Share of Operating Expenses in the respective shares of the respective categories of Operating Expenses as set forth below.

(a) Tenant's Project Share of Project Operating Expenses, which is the percentage obtained by dividing the rentable square footage of the Premises by the rentable square footage of the Project and as of the date hereof equals the percentage set forth in Section 1.01(16);

(b) Tenant's Building Share of Building Operating Expenses, which is the percentage obtained by dividing the rentable square footage of the Premises respectively for each building in which the Premises is located by the total rentable square footage of such building and as of the date hereof equals the percentage set forth in Section 1.01(16);

(c) Tenant's Phase Share of Phase Operating Expenses, which is the percentage obtained by dividing the aggregate rentable square footage of the Premises by the total rentable square footage of Tenant's Phase and as of the date hereof equals the percentage set forth in Section 1.01(16);

(d) Project Operating Expenses shall mean all Operating Expenses that are not included as Phase Operating Expenses (defined below) and that are not either Building Operating Expenses or operating expenses directly and separately identifiable to the operation, maintenance or repair of any other building located in the Project, but Project Operating Expenses includes operating expenses allocable to any areas of the Building or any other building during such time as such areas are made available by Landlord for the general common use or benefit of all tenants of the Project, and their employees and invitees, or the public, as such areas currently exist and as they may be changed from time to time;

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(e) Building Operating Expenses shall mean Operating Expenses that are directly and separately identifiable to each building in which the Premises or part thereof is located;

(f) Phase Operating Expenses shall mean Operating Expenses that Landlord may allocate to a Phase as directly and separately identifiable to all buildings located in the Phase (including but not limited to the Building) and may include Project Operating Expenses that are separately identifiable to a Phase;

(g) Landlord shall have the right to allocate a particular item or portion of Operating Expenses as any one of Project Operating Expenses, Building Operating Expenses or Phase Operating Expenses; however, in no event shall any portion of Building Operating Expenses, Project Operating Expenses or Phase Operating Expenses be assessed or counted against Tenant more than once; and

(h) Notwithstanding anything to the contrary contained in this Section 4.01, as to each specific category of Operating Expense which one or more tenants of the Building either pays directly to third parties or specifically reimburses to Landlord (for example, separately contracted janitorial services or property taxes directly reimbursed to Landlord), then, on a category by category basis, the amount of Operating Expenses for the affected period shall be adjusted as follows: (1) all such tenant payments with respect to such category of expense and all of Landlord's costs reimbursed thereby shall be excluded from Operating Expenses and Tenant's Building Share, Tenant's Phase Share or Tenant's Project Share, as the case may be, for such category of Operating Expense shall be adjusted by excluding the square footage of all such tenants, and (2) if Tenant pays or directly reimburses Landlord for such category of Operating Expense, such category of Operating Expense shall be excluded from the determination of Operating Expenses for the purposes of this Lease.

4.02 RENT ADJUSTMENTS

Tenant shall pay to Landlord Rent Adjustments with respect to each Adjustment Year as follows:

(a) The Rent Adjustment Deposit shall be paid monthly during the Term with the payment of Monthly Base Rent, except the first installment which shall be paid by Tenant to Landlord concurrently with execution of this Lease. The Rent Adjustment Deposit represents, on a monthly basis, Tenant's Share of Landlord's estimate of Operating Expenses, as described in Section 4.01, for the applicable Adjustment Year (or portion thereof);

and

(b) Any Rent Adjustments due in excess of the Rent Adjustment Deposits in accordance with Section 4.03.

4.03 STATEMENT OF LANDLORD

Within one hundred twenty (120) days after the end of each calendar year or as soon thereafter as reasonably possible, Landlord will furnish Tenant a statement ("Landlord's Statement") showing the following:

(a) Operating Expenses for the last Adjustment Year showing in reasonable detail the actual Operating Expenses categorized among Project Operating Expenses, Building Operating Expenses and Phase Operating Expenses for such period and Tenant's Share of each as described in Section 4.01 above;

(b) The amount of Rent Adjustments due Landlord for the last Adjustment Year, less credit for Rent Adjustment Deposits paid, if any; and
Any change in the Rent Adjustment Deposit due monthly in the current Adjustment Year, including the amount or revised amount due for months preceding any such change pursuant to Landlord's Statement.

Tenant shall pay to Landlord within ten (10) days after receipt of such statement any amounts for Rent Adjustments then due in accordance with Landlord's Statement. Any amounts due from Landlord to Tenant pursuant to this Section shall be credited to the Rent Adjustment Deposit next coming due, or refunded to Tenant if the Term has already expired provided Tenant is not in default hereunder. No interest or penalties shall accrue on any amounts which Landlord is obligated to credit or refund to Tenant by reason of this Section 4.03. Landlord's failure to deliver Landlord's Statement or to compute the amount of the Rent Adjustments shall not constitute a waiver by Landlord of its right to deliver such items nor constitute a waiver or release of Tenant's obligations to pay such amounts. The Rent Adjustment Deposit shall be credited against Rent Adjustments due for the applicable Adjustment Year. During the last complete calendar year or during any partial calendar year in which the Lease terminates, Landlord may include in the Rent Adjustment Deposit its estimate of Rent Adjustments which may not be finally determined until after the termination of this Lease. Tenant's obligation to pay Rent Adjustments survives the expiration or termination of the Lease. Notwithstanding the foregoing, in no event shall the sum of Monthly Base Rent and the Rent Adjustments be less than the Monthly Base Rent payable.

4.04 BOOKS AND RECORDS

Landlord shall maintain books and records showing Operating Expenses and Taxes in accordance with sound accounting and management practices, consistently applied. The Tenant or its representative (which representative shall be a certified public accountant licensed to do business in the state in which the Property is located and whose primary business is certified public accounting) shall have the right, for a period of thirty (30) days following the date upon which Landlord's Statement is delivered to Tenant, to examine the Landlord's books and records with respect to the items in the foregoing statement of Operating Expenses and Taxes during normal business hours, upon written notice, delivered at least three (3) business days in advance. If Tenant does not object in writing to Landlord's Statement within sixty (60) days of Tenant's receipt thereof, specifying the nature of the item in dispute and the reasons therefor, then Landlord's Statement shall be considered final and accepted by Tenant. Any amount due to the Landlord as shown on Landlord's Statement, whether or not disputed by Tenant as provided herein shall be paid by Tenant when due as provided above, without prejudice to any such written exception.

4.05 TENANT OR LEASE SPECIFIC TAXES

In addition to Monthly Base Rent, Rent Adjustments, Rent Adjustment Deposits and other charges to be paid by Tenant, Tenant shall pay to Landlord, upon demand, any and all taxes payable by Landlord (other than federal or state inheritance, general income, gift or estate taxes) whether or not now customary or within the contemplation of the parties hereto: (a) upon, allocable to, or measured by the Rent payable hereunder, including any gross receipts tax or excise tax levied by any governmental or taxing body with respect to the receipt of such rent; or (b) upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises or any portion thereof; or (c) upon the measured value of Tenant's personal property or trade fixtures located in the Premises or in any storeroom or any other place in the Premises or the Property, or the areas used in connection with the operation of the Property, it being the intention of Landlord and Tenant that, to the extent possible, Tenant shall cause such taxes on personal property or trade fixtures to be billed to and paid directly by Tenant; (d) resulting from Landlord Work, Tenant Work or Tenant Alterations to the Premises, whether title thereto is in Landlord or Tenant; or (e) upon this transaction. Taxes paid by Tenant pursuant to this Section 4.05 shall not be included in any computation of Taxes as part of Operating Expenses.
(a) Tenant, at Tenant's sole cost and expense, concurrently with execution of this Lease, shall either (1) pay Landlord in cash or immediately available funds or (2) provide Landlord the Letter of Credit (defined below) as more particularly described below, in each case in the amount of the Security specified in Section 1.01 as security ("Security") for the full and faithful performance by Tenant of each and every term, provision, covenant, and condition of this Lease. If Tenant fails timely to perform any of the terms, provisions, covenants and conditions of this Lease or any other document executed by Tenant in connection with this Lease, including, but not limited to, the payment of the Monthly Base Rent, Rent Adjustment Deposits, Rent Adjustments or the repair of damage to the Premises caused by Tenant (excluding normal wear and tear), then Landlord may use, apply, or retain the whole or any part of the Security for the payment of any such Monthly Base Rent, Rent Adjustment Deposits or Rent Adjustments not paid when due, for the cost of repairing such damage, for the cost of cleaning the Premises, for the payment of any other sum which Landlord may expend or may be required to expend by reason of Tenant's failure to perform, and otherwise for compensation of Landlord for any other loss or damage to Landlord occasioned by Tenant's failure to perform, including, but not limited to, any loss of future Rent and any damage or deficiency in the reletting of the Premises (whether such loss, damages or deficiency accrue before or after summary proceedings or other reentry by Landlord) and the amount of the unpaid past Rent, future Rent loss, and all other losses, costs and damages, that Landlord would be entitled to recover if Landlord were to pursue recovery under California Civil Code Section 1951.2 or 1951.4. If Landlord so uses, applies or retains all or part of the Security, Tenant shall within five (5) business days after demand pay or deliver to Landlord in immediately available funds the sum necessary to replace the amount used, applied or retained, except as specified in (e) below. If Tenant has fully and faithfully performed and observed all of Tenant's obligations under the terms, provisions, covenants and conditions of this Lease, the Security (except any amount retained for application by Landlord as provided herein) shall be returned or paid over to Tenant no later than ninety (90) days after the latest of: (i) the Termination Date; (ii) the removal of Tenant from the Premises; or (iii) the surrender of the Premises by Tenant to Landlord in accordance with this Lease. Provided, however, in no event shall any such return be construed as an admission by Landlord that Tenant has performed all of its obligations hereunder.

(b) The Security, whether in the form of cash, Letter of Credit (defined below) and/or Letter of Credit Proceeds (defined below), shall not be deemed an advance rent deposit or an advance payment of any kind, or a measure of Landlord's damages with respect to Tenant's failure to perform, nor shall any action or inaction of Landlord with respect to it or its use or application be a waiver of, or bar or defense to, enforcement of any right or remedy of Landlord. Landlord shall not be required to keep the Security separate from its general funds and shall not have any fiduciary duties or other duties (except as set forth in this Section) concerning the Security. Tenant shall not be entitled to any interest on the Security. In the event of any sale, lease or transfer of Landlord's interest in the Building, Landlord shall have the right to transfer the Security, or balance thereof, to the vendee, transferee or lessee and any such transfer shall release Landlord from all liability for the return of the Security. Tenant thereafter shall look solely to such vendee, transferee or lessee for the return or payment of the Security. Tenant shall not assign or encumber or attempt to assign or encumber the Security or any interest in it and Landlord shall not be bound by any such assignment, encumbrance, attempted assignment or attempted encumbrance, and regardless of one or more assignments of this Lease, Landlord may return the Security to the original Tenant without liability to any assignee. Tenant hereby waives any and all rights of Tenant under the provisions of Section 1950.7 of the California Civil Code, and any and all rights of Tenant under all other provisions of law, now or hereafter enacted, regarding security deposits.

(c) If Tenant fails timely to perform any obligation under this Article Five, such breach shall constitute a Default by Tenant under this Lease without any right to or requirement of any further notice or cure period under any other Article of this Lease, except such notice and cure period expressly provided under this Article Five.

(d) During the first six months after the date on which this Lease has been executed by both Tenant and Landlord, Tenant shall have the right, at Tenant's sole cost and expense, to provide Landlord
with the Letter of Credit (defined below) as the Security required under this Lease in substitution for the cash then held by Landlord as Security. In the event that Tenant first delivered the Security in the form of cash or immediately available funds prior to delivering the Letter of Credit, then, within thirty (30) days after Tenant's delivery to Landlord of the Letter of Credit, Landlord shall refund to Tenant the amount of cash held by Landlord as Security, less any amounts thereof used, applied or retained by Landlord pursuant to the provisions of Subsection (a) and not replenished by Tenant.

(e) As used herein, "Letter of Credit" shall mean an unconditional, irrevocable sight draft letter of credit issued, presentable and payable at the San Francisco, California or San Jose, California office of a major national bank satisfactory to Landlord in its sole discretion (the "Bank"), naming Landlord as beneficiary, in the amount specified in Section 1.01(14) above. The Letter of Credit shall provide: (i) that Landlord may make partial and multiple draws thereunder, up to the face amount thereof, and that Landlord may draw upon the Letter of Credit up to the full amount thereof, as determined by Landlord, and the Bank will pay to Landlord the amount of such draw upon receipt by the Bank of a sight draft signed by Landlord without requirement for any additional documents or statements by Landlord; and (ii) that, in the event of assignment or other transfer of either Landlord's interest in this Lease or of any interest in Landlord (including, without limitation, consolidations, mergers, reorganizations or other entity changes), the Letter of Credit shall be freely transferable by Landlord, without charge to Landlord and without recourse, to the assignee or transferee of such interest and the Bank shall confirm the same to Landlord and such assignee or transferee. The Letter of Credit shall be in the form attached as Exhibit H hereto. Provided however, if Tenant proposes to use Silicon Valley Bank as the issuer of the Letter of Credit, the form of Letter of Credit set forth in Exhibit E hereto will be acceptable to Landlord. Landlord may (but shall not be required to) draw upon the Letter of Credit and use the proceeds therefrom (the "Letter of Credit Proceeds") or any portion thereof in any manner Landlord is permitted to use the Security under this Article Five. In the event Landlord draws upon the Letter of Credit and elects not to terminate the Lease, but to use the Letter of Credit Proceeds, then within five (5) business days after Landlord gives Tenant written notice specifying the amount of the Letter of Credit Proceeds so utilized by Landlord, Tenant shall deliver to Landlord an amendment to the Letter of Credit or a replacement Letter of Credit in an amount equal to one hundred percent (100%) of the then-required amount of the Letter of Credit. Tenant's failure to deliver such amendment or replacement of the Letter of Credit to Landlord within five (5) business days after Landlord's notice shall constitute a Default by Tenant under this Article Five. The Letter of Credit shall have an initial term of no less than one (1) year, shall be "evergreen", and shall be extended, reissued or replaced by Tenant, in each case at least thirty (30) days prior to its expiration in a manner that fully complies with the requirements of this Article Five, so that in all events the Letter of Credit required hereunder shall be in full force and effect continuously until the date (the "L/C Expiration Date") for return of the Security described in Subsection (a) above. No more often than once per year, Landlord shall have the right to require Tenant to deliver to Landlord on fifteen (15) days prior notice, a replacement Letter of Credit on the same terms and conditions set forth in this Article Five, in the event that Landlord determines, in its good faith judgment, that the issuing Bank is no longer satisfactory to remain as the issuer of the Letter of Credit. Any advice from the issuer that it intends to withdraw or not extend the Letter of Credit prior to any scheduled annual expiration or the L/C Expiration Date shall entitle the Landlord to immediately draw upon the Letter of Credit.

ARTICLE SIX

UTILITIES & SERVICES

6.01 LANDLORD'S GENERAL SERVICES

Landlord shall provide maintenance and services as provided in Article Eight.

6.02 TENANT TO OBTAIN & PAY DIRECTLY

(a) Tenant shall be responsible for and shall pay promptly all charges for gas, electricity, sewer, heat, light, power, telephone, refuse pickup (to be performed on a regularly scheduled basis so
that accumulated refuse does not exceed the capacity of Tenant's refuse bins), janitorial service and all other utilities, materials and services furnished directly to or used by Tenant in, on or about the Premises, together with all taxes thereon. Tenant shall contract directly with the providing companies for such utilities and services.

(b) Notwithstanding any provision of the Lease to the contrary, without, in each instance, the prior written consent of Landlord, as more particularly provided in Article Nine, Tenant shall not: (i) make any alterations or additions to the electric or gas equipment or systems or other Building systems. Tenant's use of electric current shall at no time exceed the capacity of the wiring, feeders and risers providing electric current to the Premises or the Building. The consent of Landlord to the installation of electric equipment shall not relieve Tenant from the obligation to limit usage of electricity to no more than such capacity.

6.03 TELEPHONE SERVICES

All telegraph, telephone, and communication connections which Tenant may desire outside the Premises shall be subject to Landlord's prior written approval, in Landlord's sole discretion, and the location of all wires and the work in connection therewith shall be performed by contractors approved by Landlord and shall be subject to the direction of Landlord, except that such approval is not required as to Tenant's cabling from the Premises in a route designated by Landlord to any telephone cabinet or panel provided for Tenant's connection to the telephone cable serving the Building, so long as Tenant's equipment does not require connections different than or additional to those to the telephone cabinet or panel provided. As to any such connections or work outside the Premises requiring Landlord's approval, Landlord reserves the right reasonably to approve the entity or entities providing telephone or other communication cable installation, removal, repair and maintenance outside the Premises and reasonably to restrict and control access to telephone cabinets or panels outside the Premises. Tenant shall be responsible for and shall pay all costs incurred in connection with the installation of telephone cables and communication wiring in the Premises, including any hook-up, access and maintenance fees related to the installation of such wires and cables in the Premises and the commencement of service therein, and the maintenance thereafter of such wire and cables; and there shall be included in Operating Expenses for the Building all installation, removal, hook-up or maintenance costs incurred by Landlord in connection with telephone cables and communication wiring serving the Building which are not allocable to any individual users of such service but are allocable to the Building generally. If Tenant fails to maintain all telephone cables and communication wiring in the Premises and such failure affects or interferes with the operation or maintenance of any other telephone cables or communication wiring serving the Building, Landlord or any vendor hired by Landlord may enter into and upon the Premises forthwith and perform such repairs, restorations or alterations as Landlord deems necessary in order to eliminate any such interference (and Landlord may recover from Tenant all of Landlord's costs in connection therewith). No later than the Termination Date, Tenant agrees to remove all telephone cables and communication wiring installed by Tenant for and during Tenant's occupancy, which Landlord shall request Tenant to remove. Tenant agrees that neither Landlord nor any of its agents or employees shall be liable to Tenant, or any of Tenant's employees, agents, customers or invitees or anyone claiming through, by or under Tenant, for any damages, injuries, losses, expenses, claims or causes of action because of any interruption, diminution, delay or discontinuance at any time for any reason in the furnishing of any telephone or other communication service to the Premises and the Building.

6.04 FAILURE OR INTERRUPTION OF UTILITY OR SERVICE

To the extent that any equipment or machinery furnished or maintained by Landlord outside the Premises is used in the delivery of utilities directly obtained by Tenant pursuant to Section 6.02 and breaks down or ceases to function properly, Landlord shall use reasonable diligence to repair same promptly. In the event of any failure, stoppage or interruption of, or change in, any utilities or services supplied by Landlord which are not directly obtained by Tenant, Landlord shall use reasonable diligence to have service promptly resumed. In either event covered by the preceding two sentences, if the cause of any such
failure, stoppage or interruption of, or change in, utilities or services is within the control of a public utility, other public or quasi-public entity, or utility provider outside Landlord's control, notification to such utility or entity of such failure, stoppage or interruption and request to remedy the same shall constitute "reasonable diligence" by Landlord to have service promptly resumed. Notwithstanding any other provision of this Section to the contrary, in the event of any failure, stoppage or interruption of, or change in, any utility or other service furnished to the Premises or the Project resulting from any cause other than the gross negligence or willful and wrongful act of Landlord or its agents or contractors, including changes in service provider or Landlord's compliance with any voluntary or similar governmental or business guidelines now or hereafter published or any requirements now or hereafter established by any governmental agency, board or bureau having jurisdiction over the operation of the Property: (a) Landlord shall not be liable for, and Tenant shall not be entitled to, any abatement or reduction of Rent; (b) no such failure, stoppage, or interruption of any such utility or service shall constitute an eviction of Tenant or relieve Tenant of the obligation to perform any covenant or agreement of this Lease to be performed by Tenant; (c) Landlord shall not be in breach of this Lease nor be liable to Tenant for damages or otherwise.

6.05 INTENTIONALLY OMITTED

6.06 SIGNAGE

Except as set forth in Rider 2, Tenant shall not install any signage within the Project or the Premises without obtaining the prior written approval of Landlord, and Tenant shall be responsible for procurement, installation, maintenance and removal of any such signage installed by Tenant, and all costs in connection therewith. Any such signage shall comply with Landlord's current Project signage criteria and all Laws.

ARTICLE SEVEN
POSSESSION, USE AND CONDITION OF PREMISES

7.01 POSSESSION AND USE OF PREMISES

(a) Tenant shall occupy and use the Premises only for the uses specified in Section 1.01(17) to conduct Tenant's business. Tenant shall not occupy or use the Premises (or permit the use or occupancy of the Premises) for any purpose or in any manner which: (1) is unlawful or in violation of any Law or Environmental Law; (2) may be dangerous to persons or property or which may increase the cost of, or invalidate, any policy of insurance carried on the Building or covering its operations; (3) is contrary to or prohibited by the terms and conditions of this Lease or the rules and regulations as provided in Article Eighteen; (4) contrary to or prohibited by the articles, bylaws or rules of any owner's association affecting the Project; (5) would obstruct or interfere with the rights of other tenants or occupants of the Building or the Project, or injure or annoy them, or would tend to create or continue a nuisance; or (6) would constitute any waste in or upon the Premises or Project.

(b) Landlord and Tenant acknowledge that the Americans With Disabilities Act of 1990 (42 U.S.C. § 12101 et seq.) and regulations and guidelines promulgated thereunder, as all of the same may be amended and supplemented from time to time (collectively referred to herein as the "ADA") establish requirements for business operations, accessibility and barrier removal, and that such requirements may or may not apply to the Premises, the Building and the Project depending on, among other things: (1) whether Tenant's business is deemed a "public accommodation" or "commercial facility", (2) whether such requirements are "readily achievable", and (3) whether a given alteration affects a "primary function area" or triggers "path of travel" requirements. The parties hereby agree that: (a) Landlord shall be responsible for ADA Title III compliance in the Common Areas, except as provided below, (b) Tenant shall be responsible for ADA Title III compliance in the Premises, including any leasehold improvements or other work to be performed in the Premises under or in connection with this Lease, (c) Landlord may perform, or require that Tenant perform, and Tenant shall be responsible for the cost of, ADA Title III "path of travel" requirements triggered by Tenant Additions in the Premises, and (d) Landlord may perform, or require Tenant to perform, and Tenant shall be responsible for the cost of, ADA Title III compliance in the
Common Areas necessitated by the Building being deemed to be a "public accommodation" instead of a "commercial facility" as a result of Tenant's use of the Premises. To the extent Tenant shall occupy the entire Building or an entire floor in the Building, all ADA Title III requirements relating to the restrooms, elevator lobbies and corridors on such floor shall be the responsibility of Tenant. In such event, all matters related to "life safety" on such floor shall also be the responsibility of Tenant. Tenant shall be solely responsible for requirements under Title I of the ADA relating to Tenant's employees. Notwithstanding any provision of the foregoing to the contrary, Landlord shall perform and be responsible for any ADA Title III compliance outside the Building (the cost of which shall be included in Operating Expenses unless expressly excluded from the definition of Operating Expenses), but Landlord shall not be obligated to pay for any compliance outside the Building to the extent that Tenant is responsible for such compliance pursuant to items (c) or (d) above.

(c) Landlord and Tenant agree to cooperate and use commercially reasonable efforts to participate in traffic management programs generally applicable to businesses located in or about the area and Tenant shall encourage and support van and carpooling by, and staggered and flexible working hours for, its office workers and service employees to the extent reasonably permitted by the requirements of Tenant's business. Neither this Section or any other provision of this Lease is intended to or shall create any rights or benefits in any other person, firm, company, governmental entity or the public.

(d) Tenant agrees to cooperate with Landlord and to comply with any and all guidelines or controls concerning energy management imposed upon Landlord by federal or state governmental organizations or by any energy conservation association to which Landlord is a party or which is applicable to the Building.

7.02 HAZARDOUS MATERIAL

(a) Tenant shall not use, generate, manufacture, produce, store, handle, release, discharge, or dispose of, on, under or about the Premises or any part of the Project, or transport to or from the Premises or any part of the Project, any Hazardous Material, or allow its employees, agents, contractors, licensees, invitees or any other person or entity under Tenant's control ("Tenant Parties") to do so except to the extent expressly provided below. Provided that the Premises are used only for the uses specified in Section 1.01(17) above, Tenant shall be permitted to use and store in, and transport to and from, the Premises Hazardous Material identified on Exhibit D hereto and by this reference incorporated herein ("Permitted Hazardous Material") so long as: (i) each item of the Permitted Hazardous Material is used or stored in, or transported to and from, the Premises only to the extent necessary for Tenant's operation of its business at the Premises; (ii) at no time shall any Permitted Hazardous Material be in use or storage at the Premises in excess of the quantity specified therefor in Exhibit D; (iii) Tenant shall not install any underground tanks of any type; and (iv) the conditions and provisions set forth in this Section 7.02 are complied with. If Tenant desires to add additional types or quantities of Hazardous Materials to the list of Permitted Hazardous Materials specified in Exhibit D, Tenant shall give Landlord notice of the Hazardous Materials and quantities thereof that Tenant desires to use at the Premises and Landlord shall thereafter have the right to approve or disapprove such additional Hazardous Materials. Failure to notify Tenant in writing of its decision within said ten (10) day period shall be deemed disapproval by Landlord. Tenant shall comply with and shall cause all Tenant Parties to comply with all Environmental Laws and other Laws pertaining to Tenant's occupancy and use of the Premises and concerning the proper use, generation, manufacture, production, storage, handling, release, discharge, removal and disposal of any Hazardous Material introduced to the Premises, the Building or the Property by Tenant or any of the Tenant Parties. Without limiting the generality of the foregoing:

(1) Tenant shall provide Landlord promptly with copies of: (x) all permits, licenses and other governmental and regulatory approvals with respect to the use, generation, manufacture, production, storage, handling, release, discharge, removal and disposal by Tenant or any of the Tenant Parties of Hazardous Material at the Project; and (y) each hazardous material
management plan or similar document ("Plan(s)") with respect to use, generation, manufacture, production, storage, handling, release, discharge, removal or disposal of Hazardous Material by Tenant or any of the Tenant Parties necessary to comply with Environmental Laws or other Laws prepared by or on behalf of Tenant or any of the Tenant Parties (whether or not required to be submitted to a governmental agency) and updates thereof in the event of any change in the Permitted Hazardous Materials used by Tenant or when otherwise required by Law.

(2) If Tenant is notified of any investigation or violation of any Environmental Laws or other Laws arising from any activity of Tenant or any of the Tenant Parties at the Property, or if Tenant knows, or has reasonable cause to believe, that a Hazardous Material has come to be located in, on, under or about the Premises, the Building or the Property by Tenant or any of the Tenant Parties, Tenant shall immediately give Landlord written notice of such fact, and shall provide Landlord with a copy of all reports, notices, claims or other documentation which it has concerning the presence of such Hazardous Material. In such event Landlord may conduct, at Tenant's expense, such tests and studies as Landlord deems necessary to comply with this Lease, Environmental Laws, other Laws, or relating to the alleged presence of Hazardous Material introduced to the Premises, the Building or the Property by Tenant or any of the Tenant Parties. Further, Landlord may conduct, at Tenant's expense, such tests and studies as Landlord deems necessary to comply with this Lease, Environmental Laws, other Laws, or relating to the alleged presence of Hazardous Material introduced to the Premises, the Building or the Property by Tenant or any of the Tenant Parties. In the event such tests and studies done at Landlord's expense reasonably indicate that Tenant or Tenant Parties have violated Environmental Laws or caused a release of Hazardous Material, then Tenant shall reimburse Landlord the cost of such tests and studies.

(3) Neither Tenant nor any of the Tenant Parties shall cause or permit any Hazardous Material to be released, discharged or disposed of in, on, under or about the Premises, the Building or the Property (including through the plumbing or sanitary sewer system) and shall promptly, at Tenant's expense, take all investigatory and/or remedial action reasonably recommended, whether or not formally ordered or required, for the cleanup of any contamination of, and for the maintenance, security and/or monitoring of the Premises, the Building or neighboring properties, that was caused or materially contributed to by Tenant, or pertaining to or involving any Hazardous Material brought onto the Premises or the Project or the Property by Tenant or any of the Tenant Parties.

(4) Tenant shall, no later than the Termination Date, surrender the Premises to Landlord free of Hazardous Material and with all remedial and/or closure plans completed (and deliver evidence thereof to Landlord).

(b) To the extent permitted by law, Tenant hereby indemnifies and agrees to protect, defend and hold the Indemnitees harmless against all actions, claims, demands, liability, costs and expenses, including reasonable attorneys' fees and expenses for the defense thereof, arising from the use, generation, manufacture, production, storage, handling, release, threatened release, discharge, disposal, transportation to or from, or presence of any Hazardous Material on, under or about the Premises or any part of the Project caused by Tenant or by any of the Tenant Parties, whether before, during or after the Term. Tenant's obligations under this Section 7.02 shall survive the expiration or earlier termination of this Lease. In case of any action or proceeding brought against the Indemnitees by reason of any such claim, upon notice from Landlord, Tenant covenants to defend such action or proceeding by counsel chosen by Landlord, in Landlord's sole discretion. Landlord reserves the right to settle, compromise or dispose of any and all actions, claims and demands related to the foregoing indemnity, subject to the prior written approval of Tenant, which may not unreasonably be withheld. Landlord acknowledges that the sewer system for the Premises joins a common sewer discharge line shared by other tenants of the Building and confirms that notwithstanding that some elements of the Building sewer discharge line are shared, Tenant shall be responsible only for materials actually discharged by Tenant or the Tenant Parties.
(c) The right to use and store in, and transport to and from, the Premises the Permitted Hazardous Material is personal to Genomic Health and may not be assigned or otherwise transferred by it without the prior written consent of Landlord, which consent may be withheld in Landlord's sole discretion, except (i) to a Permitted Transferee which is an assignee of the Lease and which has satisfied the requirements of Sections 10.01 and 10.05 of this Lease; and (ii) Genomic Health may permit a Permitted Transferee which is a sublessee to use and store in, and transport to and from, the Premises the Permitted Hazardous Material to the same extent as Genomic Health has such right under this Lease, subject to all the provisions of this Lease. Any consent by Landlord pursuant to Article Ten to an assignment, transfer, subletting, mortgage, pledge, hypothecation or encumbrance of this Lease, and any interest therein or right or privilege appurtenant thereto, shall not constitute consent by Landlord to the use or storage at, or transportation to, the Premises of any Hazardous Material (including a Permitted Hazardous Material) by any such assignee, sublessee or transferee unless Landlord expressly agrees otherwise in writing. Provided however, at the time Tenant requests approval of any proposed assignment or sublease of this Lease by Tenant, Tenant shall submit to Landlord the proposed Permitted Hazardous Material list of the proposed assignee or sublessee. Landlord shall have the right, in its sole discretion, to approve the proposed assignee's or sublessee's proposed Permitted Hazardous Material list, or to require modifications to said list. In the event that Landlord does not approve of the proposed assignee's or sublessee's Permitted Hazardous Material list, or the proposed assignee or sublessee cannot or will not modify said list, then it shall be reasonable for purposes of Article Ten hereof for Landlord to refuse its consent to the proposed assignee or sublessee. In the event that the proposed Hazardous Material list of the assignee or sublessee includes any Hazardous Material different from or in greater quantity than those on Tenant's Permitted Hazardous Material list, Tenant shall pay Landlord, whether or not Landlord consents to the proposed list of Permitted Hazardous Materials and/or to the proposed assignment or sublease, (i) a processing fee of Three Thousand Dollars ($3,000.00) at the time Tenant submits the request for approval, and (ii) the reasonable fees and expenses of any consultants retained by Landlord in connection with review of the proposed Permitted Hazardous Material list and use thereof by the proposed assignee or sublessee. Any consent by Landlord to the use or storage at, or transportation to or from the Premises, of any Hazardous Material (including a Permitted Hazardous Material) by an assignee, sublessee or transferee of Tenant shall not constitute a waiver of Landlord's right to refuse such consent as to any subsequent assignee or transferee.

(d) Tenant acknowledges that the sewer piping at the Project is made of ABS plastic. Accordingly, without Landlord's prior written consent, which may be given or withheld in Landlord's sole discretion, only ordinary domestic sewage is permitted to be put into the drains at the Premises. UNDER NO CIRCUMSTANCES SHALL TENANT EVER DEPOSIT ANY ESTERS OR KETONES (USUALLY FOUND IN SOLVENTS TO CLEAN UP PETROLEUM PRODUCTS) IN THE DRAINS AT THE PREMISES. If Tenant desires to put any substances other than ordinary domestic sewage into the drains, it shall first submit to Landlord a complete description of each such substance, including its chemical composition, and a sample of such substance suitable for laboratory testing. Landlord shall promptly determine whether or not the substance can be deposited into the drains and its determination shall be absolutely binding on Tenant. Upon demand, Tenant shall reimburse Landlord for expenses incurred by Landlord in making such determination. If any substances not so approved hereunder are deposited in the drains in Tenant's Premises, Tenant shall be liable to Landlord for all damages resulting therefrom, including but not limited to all costs and expenses incurred by Landlord in repairing or replacing the piping so damaged.

7.03 LANDLORD ACCESS TO PREMISES; APPROVALS

(a) Tenant shall permit Landlord to erect, use and maintain pipes, ducts, wiring and conduits in and through the Premises, so long as Tenant's use, layout or design of the Premises is not materially affected or altered. Landlord or Landlord's agents shall have the right to enter upon the Premises (i) in the event of an emergency, without prior notice, or (ii) with 24-hour prior notice to inspect the Premises, to perform janitorial and other services (if any), to conduct safety and other testing in the Premises and to
make such repairs, alterations, improvements or additions to the Premises or the Building or other parts of the Property as Landlord may deem necessary or desirable (including all alterations, improvements and additions in connection with a change in service provider or providers). Janitorial and cleaning services (if any) shall be performed after normal business hours. Any entry or work by Landlord may be during normal business hours and Landlord may use reasonable efforts to ensure that any entry or work shall not materially interfere with Tenant's occupancy of the Premises.

(b) If Tenant or its agents shall not be personally present to permit an entry into the Premises when for any reason an entry therein shall be necessary or permissible, Landlord (or Landlord's agents), after having properly notified Tenant (unless Landlord believes an emergency situation exists), may enter the Premises without rendering Landlord or its agents liable therefor, and without relieving Tenant of any obligations under this Lease.

(c) Landlord may enter the Premises for the purpose of conducting such inspections, tests and studies as Landlord may deem desirable or necessary to confirm Tenant’s compliance with all Laws and Environmental Laws or for other purposes necessary in Landlord's reasonable judgment to ensure the sound condition of the Property and the systems serving the Property. Landlord's rights under this Section 7.03 (c) are for Landlord's own protection only, and Landlord has not, and shall not be deemed to have assumed, any responsibility to Tenant or any other party as a result of the exercise or non-exercise of such rights, for compliance with Laws or Environmental Laws or for the accuracy or sufficiency of any item or the quality or suitability of any item for its intended use.

(d) Landlord may do any of the foregoing, or undertake any of the inspection or work described in the preceding paragraphs without such action constituting an actual or constructive eviction of Tenant, in whole or in part, or giving rise to an abatement of Rent by reason of loss or interruption of business of the Tenant, or otherwise.

(e) The review, approval or consent of Landlord with respect to any item required or permitted under this Lease is for Landlord's own protection only, and Landlord has not, and shall not be deemed to have assumed, any responsibility to Tenant or any other party, as a result of the exercise or non-exercise of such rights, for compliance with Laws or Environmental Laws or for the accuracy or sufficiency of any item or the quality or suitability of any item for its intended use.

7.04 QUIET ENJOYMENT

Landlord covenants, in lieu of any implied covenant of quiet possession or quiet enjoyment, that so long as Tenant is in compliance with the covenants and conditions set forth in this Lease, Tenant shall have the right to quiet enjoyment of the Premises without hindrance or interference from Landlord or those claiming through Landlord, and subject to the covenants and conditions set forth in the Lease and to the rights of any Mortgagee or ground lessor.

ARTICLE EIGHT

MAINTENANCE & HVAC

8.01 LANDLORD’S MAINTENANCE

Subject to Article Fourteen and Section 8.02, Landlord shall maintain the structural portions of the Building, the roof, exterior walls and exterior doors, foundation, and underslab standard sewer system of the Building in good, clean and safe condition. Notwithstanding the foregoing, Landlord shall have no responsibility to perform preventive maintenance or service for, or to repair any heating, ventilation and air conditioning equipment and systems serving the Premises (“HVAC”), and all such preventive maintenance, service, and repairs shall be performed by Tenant pursuant to the terms of Section 8.02. Landlord shall also (a) maintain the landscaping, parking facilities and other Common Areas of the Project, (b) wash the outside of exterior windows at intervals determined by Landlord, and (c) be
responsible for maintaining compliance of the Common Areas with all applicable Laws to the extent required by a governmental authority with jurisdiction (except to the extent such compliance is triggered by the application for any permit or approval required in connection with any of the Tenant Additions or is the responsibility of Tenant under this Lease, in which events the Tenant shall be responsible for such compliance). Except as provided in Article Fourteen and Article Fifteen, there shall be no abatement of rent, no allowance to Tenant for diminution of rental value and no liability of Landlord by reason of inconvenience, annoyance or any injury to or interference with Tenant's business arising from the making of or the failure to make any repairs, alterations or improvements in or to any portion of the Project or in or to any fixtures, appurtenances or equipment therein. Tenant waives the right to make repairs at Landlord's expense under any law, statute or ordinance now or hereafter in effect.

8.02 TENANT'S MAINTENANCE

(a) Subject to the provisions of Article Fourteen, Tenant shall, at Tenant's sole cost and expense, maintain and make all repairs to the Premises and fixtures therein which Landlord is not required to make pursuant to Section 8.01, including repairs to the interior walls, ceilings and windows of the Premises, the interior doors, Tenant's signage, and the electrical, life-safety, plumbing located within the Premises and any HVAC serving only the Premises, and shall maintain the Premises, the fixtures, HVAC systems serving only the Premises, utilities systems or portions thereof serving only the Premises, and garbage enclosures, if any, for Tenant's exclusive use outside the Premises, in a good, clean and safe condition. Tenant shall deliver to Landlord a copy of any maintenance contract entered into by Tenant with respect to the Premises. Tenant shall also, at Tenant's expense, keep any non-standard heating, ventilating and air conditioning equipment and other non-standard equipment installed by or on behalf of Tenant in good condition and repair, using contractors approved in advance, in writing, by Landlord, which approval shall not be unreasonably withheld. Notwithstanding Section 8.01 above, to the extent that Landlord is not reimbursed by insurance and no waiver set forth in Section 16.04 is applicable, Tenant will pay for any repairs to the Building or the Project which are caused by any negligence or willful and wrongful act, of Tenant or its assignees, subtenants or employees, or of the respective agents of any of the foregoing persons, or of any other persons permitted in the Building or elsewhere in the Project by Tenant or any of them. Tenant will maintain the Premises, and will leave the Premises upon termination of this Lease, in a safe, clean, neat and sanitary condition.

(b) With respect to HVAC, Tenant, at Tenant's sole cost and expense, shall enter into contracts ("HVAC Service Contracts") for regularly scheduled inspections and preventive maintenance and service, as to which the contractors, scope of work, frequency of inspection, maintenance or service, shall be subject to Landlord's prior written approval, in its sole discretion. If requested by Landlord, Tenant shall cause the contractor for such HVAC Service Contracts to deliver written reports or service records, as applicable, to Landlord within ten (10) days after the date of such inspection, maintenance and/or service. Tenant shall deliver to Landlord a copy of the initial HVAC Service Contracts within sixty (60) days after the Commencement Date and of subsequent HVAC Service Contracts entered into by Tenant within ten (10) days after execution thereof (which subsequent HVAC Service Contracts shall be subject to the same approval standards and requirements as set forth above with respect to the initial contract). In the event Tenant fails, in the reasonable judgment of Landlord, to meet the requirements for such HVAC Service Contracts and cause such inspections, maintenance and service to be performed, which failure continues at the end of fifteen (15) days following written notice given by Landlord stating the nature of the failure, Landlord shall have the right (but shall not be obligated) to obtain such HVAC Service Contracts and to enter the Premises and perform such inspection, maintenance and service, at Tenant's sole cost and expense; provided, however, if the nature of the maintenance or repair is such that it cannot, with the exercise of reasonable diligence, be completed within fifteen (15) days of Tenant's receipt of Landlord's notice, Landlord shall not undertake such inspection, maintenance and service at Tenant's expense provided Tenant commences such inspection, maintenance and service in the manner required above within said 15-day period and thereafter diligently and continuously prosecutes the same to completion and provided further, however, that in the event of an emergency condition, Landlord shall have the right to make such inspection, maintenance, service and/or repairs on behalf of Tenant at
Tenant's sole cost and expense after giving Tenant such notice, if any, as is reasonable under the circumstances. Landlord's right of entry pursuant to Section 7.03 shall include the right to enter and inspect the Premises for violations of Tenant's covenants herein. Tenant shall maintain written records of HVAC inspection, maintenance, service repairs, and shall use certified technicians approved in writing by Landlord to perform such maintenance and repairs.

ARTICLE NINE

ALTERATIONS AND IMPROVEMENTS

9.01 TENANT ALTERATIONS

(a) The following provisions shall apply to the completion of any Tenant Alterations:

(1) Tenant shall not, except as provided herein, without the prior written consent of Landlord, which consent shall not be unreasonably withheld, make or cause to be made any Tenant Alterations in or to the Premises or any Property systems serving the Premises. Prior to making any Tenant Alterations, Tenant shall give Landlord ten (10) days prior written notice (or such earlier notice as would be necessary pursuant to applicable Law) to permit Landlord sufficient time to post appropriate notices of non-responsibility. Subject to all other requirements of this Article Nine, Tenant may, without Landlord's prior written consent, undertake (i) Decoration work and/or (ii) any Alterations that (x) do not adversely affect the roof, structural portions or the systems or equipment of the Building, (y) are not visible from the exterior of the Building, and (z) do not cost, in the aggregate, over the Term of the Lease, in excess of $50,000. Tenant shall furnish Landlord with the names and addresses of all contractors and subcontractors and copies of all contracts. All Tenant Alterations shall be completed at such time and in such manner as Landlord may from time to time designate, and only by contractors or mechanics approved by Landlord, which approval shall not be unreasonably withheld. The contractors, mechanics and engineers who may be used are further limited to those whose work will not cause or threaten to cause disharmony or interference with Landlord or other tenants in the Building and their respective agents and contractors performing work in or about the Building. Landlord may further condition its consent upon Tenant furnishing to Landlord and Landlord approving prior to the commencement of any work or delivery of materials to the Premises related to the Tenant Alterations such of the following as specified by Landlord: architectural plans and specifications, opinions from Landlord's engineers stating that the Tenant Alterations will not in any way adversely affect the Building's systems, necessary permits and licenses, certificates of insurance, and such other documents in such form reasonably requested by Landlord. Landlord may, in the exercise of reasonable judgment, request that Tenant provide Landlord with appropriate evidence of Tenant's ability to complete and pay for the completion of the Tenant Alterations such as a performance bond or letter of credit. Upon completion of the Tenant Alterations, Tenant shall deliver to Landlord an as-built mylar and digitized (if available) set of plans and specifications for the Tenant Alterations.

(2) Tenant shall pay the cost of all Tenant Alterations and the cost of decorating the Premises and any work to the Property occasioned thereby. In connection with completion of any Tenant Alterations, Tenant shall, upon receipt of Landlord's itemized invoice therefor, pay Landlord's actual and reasonable costs to review the plans and specifications for such Tenant Alterations and to monitor the performance thereof, including a construction administration fee and all elevator and hoisting charges at Landlord's then standard rate. Upon completion of Tenant Alterations, Tenant shall furnish Landlord with contractors' affidavits and full and final waivers of lien and receipted bills covering all labor and materials expended and used in connection therewith and such other documentation reasonably requested by Landlord or Mortgagee.

(3) Tenant agrees to complete all Tenant Alterations (i) in accordance with all Laws, Environmental Laws, all requirements of applicable insurance companies and in accordance with
Landlord's standard construction rules and regulations, and (ii) in a good and workmanlike manner with the use of good grades of materials. Tenant shall notify Landlord immediately if Tenant receives any notice of violation of any Law in connection with completion of any Tenant Alterations and shall immediately take such steps as are necessary to remedy such violation. In no event shall such supervision or right to supervise by Landlord nor shall any approvals given by Landlord under this Lease constitute any warranty by Landlord to Tenant of the adequacy of the design, workmanship or quality of such work or materials for Tenant’s intended use or of compliance with the requirements of Section 9.01(a)(3)(i) and (ii) above or impose any liability upon Landlord in connection with the performance of such work.

(b) All Tenant Additions to the Premises whether installed by Landlord or Tenant, shall without compensation or credit to Tenant, become part of the Premises and the property of Landlord at the time of their installation and shall remain in the Premises, unless pursuant to Article Twelve, Tenant may remove them or is required to remove them at Landlord's request. Tenant's Personal Property, as set forth in Exhibit G, shall at all times remain the property of Tenant and Tenant shall remove such property at the expiration or earlier termination of this Lease.

9.02 LIENS

Tenant shall not permit any lien or claim for lien of any mechanic, laborer or supplier or any other lien to be filed against the Building, the Land, the Premises, or any other part of the Property arising out of work performed, or alleged to have been performed by, or at the direction of, or on behalf of Tenant. If any such lien or claim for lien is filed, Tenant shall within ten (10) days of receiving notice of such lien or claim (a) have such lien or claim for lien released of record or (b) deliver to Landlord a bond in form, content, amount, and issued by surety, satisfactory to Landlord, indemnifying, protecting, defending and holding harmless the Indemnitees against all costs and liabilities resulting from such lien or claim for lien and the foreclosure or attempted foreclosure thereof. If Tenant fails to take any of the above actions, Landlord, in addition to its rights and remedies under Article Eleven, without investigating the validity of such lien or claim for lien, may pay or discharge the same and Tenant shall, as payment of additional Rent hereunder, reimburse Landlord upon demand for the amount so paid by Landlord, including Landlord's expenses and reasonable attorneys' fees.

ARTICLE TEN

ASSIGNMENT AND SUBLETTING

10.01 ASSIGNMENT AND SUBLETTING

(a) Without the prior written consent of Landlord, which may be withheld in Landlord's sole discretion, Tenant may not sublease, assign, mortgage, pledge, hypothecate or otherwise transfer or permit the transfer of this Lease or the encumbering of Tenant's interest therein in whole or in part, by operation of Law or otherwise or permit the use or occupancy of the Premises, or any part thereof, by anyone other than Tenant, provided, however, if Landlord chooses not to recapture the space proposed to be subleased or assigned as provided in Section 10.02, Landlord shall not unreasonably withhold its consent to a subletting or assignment under this Section 10.01. Tenant agrees that the provisions governing sublease and assignment set forth in this Article Ten shall be deemed to be reasonable. If Tenant desires to enter into any sublease of the Premises or assignment of this Lease, Tenant shall deliver written notice thereof to Landlord ("Tenant's Notice"), together with the identity of the proposed subtenant or assignee and the proposed principal terms thereof and financial and other information sufficient for Landlord to make an informed judgment with respect to such proposed subtenant or assignee at least sixty (60) days prior to the commencement date of the term of the proposed sublease or assignment. If Tenant proposes to sublease less than all of the Rentable Area of the Premises, the space proposed to be sublet and the space retained by Tenant must each be a marketable unit as reasonably determined by Landlord and otherwise in compliance with all Laws; provided however, so long as the Tenant is Genomic Health or a Permitted Transferee which is an assignee of the Lease which has
satisfied the requirements of Sections 10.01 and 10.05 below, the foregoing shall not apply to a sublease for a sublease term of a year or less, for
undemised space in the aggregate (for one or more such subleases in effect at any one time) up to 3,000 square feet of Rentable Area. Landlord
shall notify Tenant in writing of its approval or disapproval of the proposed sublease or assignment or its decision to exercise its rights under Section
10.02 within thirty (30) days after receipt of Tenant's Notice (and all required information). In no event may Tenant sublease any portion of the
Premises or assign the Lease to any other tenant of the Project. Tenant shall submit for Landlord's approval (which approval shall not be
unreasonably withheld) any advertising which Tenant or its agents intend to use with respect to the space proposed to be sublet.

(b) With respect to Landlord's consent to an assignment or sublease, Landlord may take into consideration any factors which Landlord may
deem relevant, and the reasons for which Landlord's denial shall be deemed to be reasonable shall include, without limitation, the following:

(i) the business reputation or creditworthiness of any proposed subtenant or assignee is not acceptable to Landlord; or

(ii) in Landlord's reasonable judgment the proposed assignee or subtenant would diminish the value or reputation of the Building or
Landlord; or

(iii) any proposed assignee's or subtenant's use of the Premises would violate Section 7.01 of the Lease or would violate the provisions of
any other leases of tenants in the Project;

(iv) the proposed assignee or subtenant is either a governmental agency, a school or similar operation, or a medical related practice; or

(v) the proposed subtenant or assignee is a bona fide prospective tenant of Landlord in the Project as demonstrated by a written proposal
dated within ninety (90) days prior to the date of Tenant's request; or

(vi) the proposed subtenant or assignee would materially increase the estimated pedestrian and vehicular traffic to and from the Premises
and the Building.

In no event shall Landlord be obligated to consider a consent to any proposed assignment of the Lease which would assign less than the entire
Premises. In the event Landlord wrongfully withholds its consent to any proposed sublease of the Premises or assignment of the Lease, Tenant's
sole and exclusive remedy therefor shall be to seek specific performance of Landlord's obligations to consent to such sublease or assignment.

(c) Any sublease or assignment shall be expressly subject to the terms and conditions of this Lease. Any subtenant or assignee shall
execute such documents as Landlord may reasonably require to evidence such subtenant or assignee's assumption of the obligations and liabilities
of Tenant under this Lease. Tenant shall deliver to Landlord a copy of all agreements executed by Tenant and the proposed subtenant and assignee
with respect to the Premises. Landlord's approval of a sublease, assignment, hypothecation, transfer or third party use or occupancy shall not
constitute a waiver of Tenant's obligation to obtain Landlord's consent to further assignments or subleases, hypothecations, transfers or third party
use or occupancy.

(d) For purposes of this Article Ten, an assignment shall be deemed to include a change in the majority control of Tenant, resulting from any
transfer, sale or assignment of shares of stock or membership interests of Tenant occurring by operation of Law or otherwise, and includes any
merger, acquisition, consolidation or reorganization, except as otherwise provided in this Subsection below. Notwithstanding any provision of this
Section to the contrary, an assignment for purposes of this Article does not include any transfer of control of the stock or membership interests of
Tenant through (i) any
public offering of shares of stock in Tenant in accordance with applicable State and Federal law, rules, regulations and orders if thereafter the stock shall be listed and publicly traded through the New York Stock Exchange or the NASDAQ national market; or (ii) public sale of such stock effected through such Exchange or the NASDAQ national market. If Tenant is a partnership, any change in the partners of Tenant shall be deemed to be an assignment.

(e) For purposes of this Lease, a "Permitted Transferee" shall mean any Person which: (i) is an Affiliate of Tenant; or (ii) is the corporation or other entity (the "Successor") resulting from a merger, conversion, consolidation or non-bankruptcy reorganization with Tenant; or (iii) is not a Successor but is otherwise a deemed assignee due to a change of control under section 10.01(d) above; or (iv) purchases, leases or acquires by way of exchange or substantially all the assets of Tenant as a going concern (the "Purchaser"). Notwithstanding anything to the contrary in Sections 10.01(a) and (b), 10.02 and 10.03, provided there is no uncured Default under this Lease, Tenant shall have the right, without the prior written consent of Landlord, to assign this Lease to a Permitted Transferee or to sublease the Premises or any part thereof to a Permitted Transferee provided that: (1) Landlord receives thirty (30) days prior written notice of an assignment or sublease (including a pending transaction described in subparts (i), (ii), (iii) or (iv) of this Section 10.01(e)); provided that Tenant may give notice in less than thirty (30) days in connection with a pending transaction described in subparts (ii) and (iv) of this Section 10.01(e) to the extent that Tenant is precluded, by the terms of the transaction or, if Tenant's stock is publicly traded, by applicable securities' laws, from making disclosure of the transaction itself; (2) with respect to an assignment of the Lease or a sublease of more than half the Premises to an entity described in subparts (ii) or (iv) of this Section 10.01(e), the Permitted Transferee's net worth is not less than Tenant's net worth (measured as of the most recent date for which financial statements prepared in accordance with GAAP are available); (3) with respect to an assignment of the Lease or a sublease of more than half the Premises to an entity described in subparts (i) or (iii) of this Section 10.01(e), Tenant (as the assignor or sublandlord) continues in existence with a net worth not less than Tenant's net worth immediately prior to such assignment or subletting; (4) the Permitted Transferee expressly assumes (except a Permitted Transferee which is a deemed assignee under subpart (iii) of this Section 10.01(e) or which is a sublessee in the event of a sublease under this Section 10.01(e)) in writing reasonably satisfactory to Landlord all of the obligations of Tenant under this Lease and delivers such assumption to Landlord no later than fifteen (15) days (or such lesser time as is appropriate in connection with a pending transaction described in subparts (ii) and (iv) of this Section 10.01(e) to the extent that Tenant is precluded, by the terms of the transaction or, if Tenant's stock is publicly traded, by applicable securities' laws, from making disclosure of the transaction itself) prior to the effective date of the assignment; (5) Landlord receives no later than five (5) days before the effective date of the assignment or sublease a processing fee of Three Thousand Dollars ($3,000.00), which shall be Landlord's earned fee whether or not the proposed assignment or sublease is completed by Tenant.

(f) With respect to any sublease to a Permitted Transferee pursuant to Subsection (e) above, Tenant hereby irrevocably assigns to Landlord, effective upon any such sublease, all rent and other payments due from subtenant under the sublease, provided however, that Tenant shall have a license to collect such rent and other payments until the occurrence of a default by Tenant under any of the provisions of the Lease, and notice to Tenant of such default shall not be a prerequisite to Landlord's right to collect subrent. At any time at Landlord's option, Landlord shall have the right to give notice to the subtenant of such assignment. Landlord shall credit Tenant with any rent received by Landlord under such assignment but the acceptance of any payment on account of rent from the subtenant as the result of any such default shall in no manner whatsoever serve to release Tenant from any liability under the terms,
covenants, conditions, provisions or agreement under the Lease. No such payment of rent or any other payment by the subtenant directly to Landlord and/or acceptance of such payment(s) by Landlord, regardless of the circumstances or reasons therefor, shall in any manner whatsoever be deemed an attornment by the subtenant to Landlord in the absence of a specific written agreement signed by Landlord to such an effect. For purposes of this Subsection, any use or occupancy by a Permitted Transferee (unless it is an assignee) without a formal sublease shall for the purposes of this Subsection be deemed to be a sublease at the same rental rate as provided in the Lease.

10.02 RECAPTURE

Landlord shall have the option to exclude from the Premises covered by this Lease ("recapture"), the space proposed to be sublet or subject to the assignment, so long as (i) the proposed transfer is not to a Permitted Transferee in accordance with the provisions of Section 10.01(e), and (ii) the proposed sublease is for the remainder of the term of this Lease and Landlord recaptures the entire portion of the Premises subject to the proposed sublease. If Landlord elects to recapture, such recapture shall be effective as of the commencement date of such sublease or assignment, Tenant shall surrender possession of the space proposed to be subleased or subject to the assignment to Landlord on the effective date of recapture of such space from the Premises, such date being the Termination Date for such space. Effective as of the date of recapture of any portion of the Premises pursuant to this section, the Monthly Base Rent, Rentable Area of the Premises and Tenant's Share shall be adjusted accordingly.

10.03 EXCESS RENT

Except with respect to an assignment or sublease to a Permitted Transferee in accordance with the provisions of Section 10.01(e), Tenant shall pay Landlord on the first day of each month during the term of the sublease or assignment, fifty percent (50%) of the amount by which the sum of all rent and other consideration (direct or indirect) due from the subtenant or assignee for such month exceeds: (i) that portion of the Monthly Base Rent and Rent Adjustments due under this Lease for said month which is allocable to the space sublet or assigned; and (ii) the following costs and expenses for the subletting or assignment of such space: (1) brokerage commissions and reasonable attorneys' fees and expenses, (2) the actual costs paid in making any improvements or substitutions in the Premises required by any sublease or assignment; and (3) "free rent" periods, costs of any inducements or concessions given to subtenant or assignee, moving costs, and other amounts in respect of such subtenant's or assignee's other leases or occupancy arrangements. All such costs and expenses shall be amortized over the term of the sublease or assignment pursuant to sound accounting principles.

10.04 TENANT LIABILITY

In the event of any sublease or assignment, whether or not with Landlord's consent, Tenant shall not be released or discharged from any liability, whether past, present or future, under this Lease, including any liability arising from the exercise of any renewal or expansion option, to the extent such exercise is expressly permitted by Landlord. Tenant's liability shall remain primary, and in the event of default by any subtenant, assignee or successor of Tenant in performance or observance of any of the covenants or conditions of this Lease, Landlord may proceed directly against Tenant without the necessity of exhausting remedies against said subtenant, assignee or successor. After any assignment, Landlord may consent to subsequent assignments or subletting of this Lease, or amendments or modifications of this Lease with assignees of Tenant, without notifying Tenant, or any successor of Tenant, and without obtaining its or their consent thereto, and such action shall not relieve Tenant or any successor of Tenant of liability under this Lease. If Landlord grants consent to such sublease or assignment, Tenant shall pay all reasonable attorneys' fees and expenses incurred by Landlord with respect to such assignment or sublease. In addition, if Tenant has any options to extend the term of this Lease or to add other space to the Premises, such options shall not be available to any subtenant or assignee, directly or indirectly without Landlord's express written consent, which may be withheld in Landlord's sole discretion.
10.05 ASSUMPTION AND ATTORNMENT

If Tenant shall assign this Lease as permitted herein, the assignee shall expressly assume all of the obligations of Tenant hereunder in a written instrument satisfactory to Landlord and furnished to Landlord not later than fifteen (15) days prior to the effective date of the assignment. If Tenant shall sublease the Premises as permitted herein, Tenant shall, at Landlord's option, within fifteen (15) days following any request by Landlord, obtain and furnish to Landlord the written agreement of such subtenant to the effect that the subtenant will attorn to Landlord and will pay all subrent directly to Landlord.

ARTICLE ELEVEN

DEFAULT AND REMEDIES

11.01 EVENTS OF DEFAULT

The occurrence or existence of any one or more of the following shall constitute a material default and breach of the Lease (a "Default") by Tenant under this Lease:

(i) Tenant fails to pay any installment or other payment of Rent, including Rent Adjustment Deposits or Rent Adjustments, within three business (3) days after written notice to Tenant of such failure to pay, provided that after Landlord has twice sent such notice to Tenant for failure to pay, thereafter such failure shall be a Default if Tenant fails to pay any such installment or other payment of Rent, including Rent Adjustment Deposits or Rent Adjustments, within three (3) business days after the date when the same are due;

(ii) Tenant fails to observe or perform any of the other covenants, conditions or provisions of this Lease or the Workletter and, unless the default involves a hazardous condition, which shall be cured forthwith or unless the failure to perform is a Default for which this Lease specifies there is no cure or grace period, fails to cure such default within thirty (30) days after written notice thereof to Tenant, provided that, if Tenant has exercised reasonable diligence to cure such failure and such failure cannot reasonably be cured within such thirty (30) day period despite reasonable diligence, Tenant shall not be in default under this subsection so long as Tenant diligently and continuously prosecutes the cure to completion;

(iii) the interest of Tenant in this Lease is levied upon under execution or other legal process;

(iv) a petition is filed by or against Tenant to declare Tenant bankrupt or seeking a plan of reorganization or arrangement under any Chapter of the Bankruptcy Act, or any amendment, replacement or substitution therefor, or to delay payment of, reduce or modify Tenant's debts, which in the case of an involuntary action is not discharged within thirty (30) days;

(v) Tenant is declared insolvent by Law or any assignment of Tenant's property is made for the benefit of creditors;

(vi) a receiver is appointed for Tenant or Tenant's property, which appointment is not discharged within thirty (30) days;

(vii) any action taken by or against Tenant to reorganize or modify Tenant's capital structure in a materially adverse way which in the case of an involuntary action is not discharged within thirty (30) days; or

(viii) upon the dissolution of Tenant.

11.02 LANDLORD'S REMEDIES
(a) A Default shall constitute a breach of the Lease for which Landlord shall have the rights and remedies set forth in this Section 11.02 and all other rights and remedies set forth in this Lease or now or hereafter allowed by Law, whether legal or equitable, and all rights and remedies of Landlord shall be cumulative and none shall exclude any other right or remedy.

(b) With respect to a Default, at any time Landlord may terminate Tenant's right to possession by written notice to Tenant stating such election. Upon the termination of Tenant's right to possession pursuant to this Section 11.02, Tenant's right to possession shall terminate and this Lease shall terminate, and Tenant shall remain liable as hereinafter provided. Upon such termination, Landlord shall have the right, subject to applicable Law, to re-enter the Premises and dispossess Tenant and the legal representatives of Tenant and all other occupants of the Premises by unlawful detainer or other summary proceedings, or otherwise as permitted by Law, regain possession of the Premises and remove their property (including their trade fixtures, personal property and those Tenant Additions which Tenant is required or permitted to remove under Article Twelve), but Landlord shall not be obligated to effect such removal, and such property may, at Landlord's option, be stored elsewhere, sold or otherwise dealt with as permitted by Law, at the risk of, expense of and for the account of Tenant, and the proceeds of any sale shall be applied pursuant to Law. Landlord shall in no event be responsible for the value, preservation or safekeeping of any such property. Tenant hereby waives all claims for damages that may be caused by Landlord's removing or storing Tenant's personal property pursuant to this Section or Section 12.01, and Tenant hereby indemnifies, and agrees to defend, protect and hold harmless, the Indemnitees from any and all loss, claims, demands, actions, expenses, liability and cost (including reasonable attorneys' fees and expenses) arising out of or in any way related to such removal or storage. Upon such written termination of Tenant's right to possession and this Lease, Landlord shall have the right to recover damages for Tenant's Default as provided herein or by Law, including the following damages provided by California Civil Code Section 1951.2:

1. the worth at the time of award of the unpaid Rent which had been earned at the time of termination;
2. the worth at the time of award of the amount by which the unpaid Rent which would have been earned after termination until the time of award exceeds the amount of such Rent loss that Tenant proves could reasonably have been avoided;
3. the worth at the time of award of the amount by which the unpaid Rent for the balance of the term of this Lease after the time of award exceeds the amount of such Rent loss that Tenant proves could be reasonably avoided; and
4. any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom. The word "rent" as used in this Section 11.02 shall have the same meaning as the defined term Rent in this Lease. The "worth at the time of award" of the amount referred to in clauses (1) and (2) above is computed by allowing interest at the Default Rate. The worth at the time of award of the amount referred to in clause (3) above is computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus one percent (1%). For the purpose of determining unpaid Rent under clause (3) above, the monthly Rent reserved in this Lease shall be deemed to be the sum of the Monthly Base Rent, and monthly Storage Space Rent, if any, and the amounts last payable by Tenant as Rent Adjustments for the calendar year in which Landlord terminated this Lease as provided hereinabove.

(c) Even if Tenant is in Default and/or has abandoned the Premises, this Lease shall continue in effect for so long as Landlord does not terminate Tenant's right to possession by written notice as provided in Section 11.02(b) above, and Landlord may enforce all its rights and remedies under this
Lease, including the right to recover Rent as it becomes due under this Lease. In such event, Landlord shall have all of the rights and remedies of a landlord under California Civil Code Section 1951.4 (lessor may continue Lease in effect after Tenant's Default and abandonment and recover Rent as it becomes due, if Tenant has the right to sublet or assign, subject only to reasonable limitations), or any successor statute. During such time as Tenant is in Default, if Landlord has not terminated this Lease by written notice and if Tenant requests Landlord's consent to an assignment of this Lease or a sublease of the Premises, subject to Landlord's option to recapture pursuant to Section 10.02, Landlord shall not unreasonably withhold its consent to such assignment or sublease. Tenant acknowledges and agrees that the provisions of Article Ten shall be deemed to constitute reasonable limitations of Tenant's right to assign or sublet. Tenant acknowledges and agrees that in the absence of written notice pursuant to Section 11.02(b) above terminating Tenant's right to possession, no other act of Landlord shall constitute a termination of Tenant's right to possession or an acceptance of Tenant's surrender of the Premises, including acts of maintenance or preservation or efforts to relet the Premises or the appointment of a receiver upon initiative of Landlord to protect Landlord's interest under this Lease or the withholding of consent to a subletting or assignment, or terminating a subletting or assignment, if in accordance with other provisions of this Lease.

(d) In the event that Landlord seeks an injunction with respect to a breach or threatened breach of any of the covenants, conditions or provisions of this Lease, Tenant agrees to pay the premium for any bond required in connection with such injunction.

(e) Tenant hereby waives any and all rights to relief from forfeiture, redemption or reinstatement granted by Law (including California Civil Code of Procedure Sections 1174 and 1179) in the event of Tenant being evicted or dispossessed for any cause or in the event of Landlord obtaining possession of the Premises by reason of Tenant's Default or otherwise;

(f) When this Lease requires giving or service of a notice of Default or of a failure of Tenant to observe or perform any covenant, condition or provision of this Lease which will constitute a Default unless Tenant so observes or performs within any applicable cure period, and so long as the notice given or served provides Tenant the longer of any applicable cure period required by this Lease or by statute, then the giving of any equivalent or similar statutory notice, including any equivalent or similar notices required by California Code of Civil Procedure Section 1161 or any similar or successor statute, shall replace and suffice as any notice required under this Lease. When a statute requires service of a notice in a particular manner, service of that notice (or a similar notice required by this Lease) in the manner required by Article Twenty-four shall replace and satisfy the statutory service—of—notice procedures, except that any notice of unlawful detainer required by California Code of Civil Procedure Section 1161 or any similar or successor statute shall be served as required by Code of Civil Procedure Section 1162 or any similar or successor statute, and for purposes of Code of Civil Procedure Section 1162 or any similar or successor statute, Tenant's "place of residence" and "usual place of business" shall mean the address specified by Tenant for notice pursuant to Section 1.01 of this Lease, as changed by Tenant pursuant to Article Twenty-four of this Lease.

(g) The voluntary or other surrender or termination of this Lease, or a mutual termination or cancellation thereof, shall not work a merger and shall terminate all or any existing assignments, subleases, subtenancies or occupancies permitted by Tenant, except if and as otherwise specified in writing by Landlord.

(h) No delay or omission in the exercise of any right or remedy of Landlord upon any default by Tenant, and no exercise by Landlord of its rights pursuant to Section 26.15 to perform any duty which Tenant fails timely to perform, shall impair any right or remedy or be construed as a waiver. No provision of this Lease shall be deemed waived by Landlord unless such waiver is in a writing signed by Landlord. The waiver by Landlord of any breach of any provision of this Lease shall not be deemed a waiver of any subsequent breach of the same or any other provision of this Lease.
11.03 ATTORNEY'S FEES

In the event any party brings any suit or other proceeding with respect to the subject matter or enforcement of this Lease, the prevailing party (as determined by the court, agency or other authority before which such suit or proceeding is commenced) shall, in addition to such other relief as may be awarded, be entitled to recover reasonable attorneys' fees, expenses and costs of investigation as actually incurred, including court costs, expert witness fees, costs and expenses of investigation, and all reasonable attorneys' fees, costs and expenses in any such suit or proceeding (including in any action or participation in or in connection with any case or proceeding under the Bankruptcy Code, 11 United States Code Sections 101 et seq., or any successor statutes, in establishing or enforcing the right to indemnification, in appellate proceedings, or in connection with the enforcement or collection of any judgment obtained in any such suit or proceeding).

11.04 BANKRUPTCY

The following provisions shall apply in the event of the bankruptcy or insolvency of Tenant:

(a) In connection with any proceeding under Chapter 7 of the Bankruptcy Code where the trustee of Tenant elects to assume this Lease for the purposes of assigning it, such election or assignment, may only be made upon compliance with the provisions of (b) and (c) below, which conditions Landlord and Tenant acknowledge to be commercially reasonable. In the event the trustee elects to reject this Lease then Landlord shall immediately be entitled to possession of the Premises without further obligation to Tenant or the trustee.

(b) Any election to assume this Lease under Chapter 11 or 13 of the Bankruptcy Code by Tenant as debtor-in-possession or by Tenant's trustee (the "Electing Party") must provide for:
   The Electing Party to cure or provide to Landlord adequate assurance that it will cure all monetary defaults under this Lease within fifteen (15) days from the date of assumption and it will cure all nonmonetary defaults under this Lease within thirty (30) days from the date of assumption. Landlord and Tenant acknowledge such condition to be commercially reasonable.

(c) If the Electing Party has assumed this Lease or elects to assign Tenant's interest under this Lease to any other person, such interest may be assigned only if the intended assignee has provided adequate assurance of future performance (as herein defined), of all of the obligations imposed on Tenant under this Lease.

   For the purposes hereof, "adequate assurance of future performance" means that Landlord has ascertained that each of the following conditions has been satisfied:

   (i) The assignee has submitted a current financial statement, certified by its chief financial officer, which shows a net worth and working capital in amounts sufficient to assure the future performance by the assignee of Tenant's obligations under this Lease; and

   (ii) Landlord has obtained consents or waivers from any third parties which may be required under a lease, mortgage, financing arrangement, or other agreement by which Landlord is bound, to enable Landlord to permit such assignment.

(d) Landlord's acceptance of rent or any other payment from any trustee, receiver, assignee, person, or other entity will not be deemed to have waived, or waive, the requirement of Landlord's consent, Landlord's right to terminate this Lease for any transfer of Tenant's interest under this Lease without such consent, or Landlord's claim for any amount of Rent due from Tenant.

11.05 LANDLORD'S DEFAULT
Landlord shall be in default hereunder in the event Landlord has not begun and pursued with reasonable diligence the cure of any failure of Landlord to meet its obligations hereunder within thirty (30) days after the receipt by Landlord of written notice from Tenant of the alleged failure to perform. In no event shall Tenant have the right to terminate or rescind this Lease as a result of Landlord's default as to any covenant or agreement contained in this Lease. Tenant hereby waives such remedies of termination and rescission and hereby agrees that Tenant's remedies for default hereunder and for breach of any promise or inducement shall be limited to a suit for damages and/or injunction. In addition, Tenant hereby covenants that, prior to the exercise of any such remedies, it will give Mortgagee notice and a reasonable time to cure any default by Landlord.

ARTICLE TWELVE

SURRENDER OF PREMISES

12.01 IN GENERAL

Upon the Termination Date, Tenant shall surrender and vacate the Premises immediately and deliver possession thereof to Landlord in a clean, good and tenantable condition, ordinary wear and tear, and damage caused by Landlord excepted. Tenant shall deliver to Landlord all keys to the Premises. Tenant shall remove from the Premises all movable personal property of Tenant and Tenant's trade fixtures, including, subject to Section 6.04, cabling for any of the foregoing, Tenant shall be entitled to remove such Tenant Additions which at the time of their installation Landlord and Tenant agreed may be removed by Tenant. Tenant shall also remove such other Tenant Additions as required by Landlord, including any Tenant Additions containing Hazardous Material. Tenant immediately shall repair all damage resulting from removal of any of Tenant's property, furnishings, Tenant's Personal Property or Tenant Additions, shall close all floor, ceiling and roof openings and shall restore the Premises to a tenantable condition as reasonably determined by Landlord. If any of the Tenant Additions which were installed by Tenant involved the lowering of ceilings, raising of floors or the installation of specialized wall or floor coverings or lights, then Tenant shall also be obligated to return such surfaces to their condition prior to the commencement of this Lease. Tenant shall also be required to close any staircases or other openings between floors. Notwithstanding any of the foregoing to the contrary, if so requested by Tenant in writing (and prominently in all capital and bold lettering which also states that such request is pursuant to Section 12.01 of the Lease) at the time Tenant requests approval of any Tenant Work or subsequent Tenant Alterations, Landlord shall advise Tenant at the time of Landlord's approval of such Tenant Work or Tenant Alterations as to whether Landlord will require that such Tenant Work or Tenant Alterations be removed by Tenant from the Premises; provided, however, regardless of the foregoing, in any event, Landlord may require removal of any Tenant Additions containing Hazardous Material and all Tenant's trade fixtures, and, subject to Section 6.03, cabling and wiring installed for Tenant's personal property or trade fixtures. In the event possession of the Premises is not delivered to Landlord when required hereunder, or if Tenant shall fail to remove those items described above, Landlord may (but shall not be obligated to), at Tenant's expense, remove any of such property and store, sell or otherwise deal with such property as provided in Section 11.02(b), including the waiver and indemnity obligations provided in that Section, and undertake, at Tenant's expense, such restoration work as Landlord deems necessary or advisable.

12.02 LANDLORD'S RIGHTS

All property which may be removed from the Premises by Landlord shall be conclusively presumed to have been abandoned by Tenant and Landlord may deal with such property as provided in Section 11.02(b), including the waiver and indemnity obligations provided in that Section. Tenant shall also reimburse Landlord for all costs and expenses incurred by Landlord in removing any of Tenant Additions required to be removed pursuant to Section 12.01 above and in restoring the Premises to the condition required by this Lease at the Termination Date.

ARTICLE THIRTEEN

HOLDING OVER
Tenant shall pay Landlord the greater of (i) 150% of the monthly Rent payable for the month immediately preceding the holding over (including increases for Rent Adjustments which Landlord may reasonably estimate) or, (ii) 150% of the fair market rental value of the Premises as reasonably determined by Landlord for each month or portion thereof that Tenant retains possession of the Premises, or any portion thereof, after the Termination Date (without reduction for any partial month that Tenant retains possession). Tenant shall also pay all damages sustained by Landlord by reason of such retention of possession. The provisions of this Article shall not constitute a waiver by Landlord of any re-entry rights of Landlord and Tenant's continued occupancy of the Premises shall be as a tenancy in sufferance.

ARTICLE FOURTEEN

DAMAGE BY FIRE OR OTHER CASUALTY

14.01 SUBSTANTIAL UNTENANTABILITY

(a) If any fire or other casualty (whether insured or uninsured) renders all or a substantial portion of the Premises or the Building untenable, Landlord shall, with reasonable promptness after the occurrence of such damage, estimate the length of time that will be required to substantially complete the repair and restoration and shall by notice advise Tenant of such estimate ("Landlord's Notice"). If Landlord estimates that the amount of time required to substantially complete such repair and restoration will exceed one hundred eighty (180) days from the date such damage occurred, then Landlord, or Tenant if all or a substantial portion of the Premises is rendered untenable, shall have the right to terminate this Lease as of the date of such damage upon giving written notice to the other at any time within twenty (20) days after delivery of Landlord's Notice, provided that if Landlord so chooses, Landlord's Notice may also constitute such notice of termination.

(b) In the event that the Building is damaged or destroyed to the extent of more than twenty-five percent (25%) of its replacement cost or to any extent if no insurance proceeds or insufficient insurance proceeds are receivable by Landlord, or if the buildings at the Project shall be damaged to the extent of fifty percent (50%) or more of the replacement value or to any extent if no insurance proceeds or insufficient insurance proceeds are receivable by Landlord, and regardless of whether or not the Premises be damaged, Landlord may elect by written notice to Tenant given within thirty (30) days after the occurrence of the casualty to terminate this Lease in lieu of so restoring the Premises, in which event this Lease shall terminate as of the date specified in Landlord's notice, which date shall be no later than sixty (60) days following the date of Landlord's notice.

(c) Unless this Lease is terminated as provided in the preceding Subsections 14.01 (a) and (b), Landlord shall proceed with reasonable promptness to repair and restore the Premises to its condition as existed prior to such casualty, subject to reasonable delays for insurance adjustments and Force Majeure delays, and also subject to zoning Laws and building codes then in effect. Landlord shall have no liability to Tenant, and Tenant shall not be entitled to terminate this Lease if such repairs and restoration are not in fact completed within the time period estimated by Landlord so long as Landlord shall proceed with reasonable diligence to complete such repairs and restoration.

(d) Tenant acknowledges that Landlord shall be entitled to the full proceeds of any insurance coverage, whether carried by Landlord or Tenant, for damages to the Premises, except for those proceeds of Tenant's insurance of its own personal property and equipment which would be removable by Tenant at the Termination Date. All such insurance proceeds shall be payable to Landlord whether or not the Premises are to be repaired and restored, provided, however, if this Lease is not terminated and the parties proceed to repair and restore Tenant Additions at Tenant's cost, to the extent Landlord received proceeds of Tenant's insurance covering Tenant Additions, such proceeds shall be applied to reimburse Tenant for its cost of repairing and restoring Tenant Additions.

(e) Notwithstanding anything in this Article Fourteen to the contrary: (i) Landlord shall have no duty pursuant to this Section to repair or restore any portion of any Tenant Additions or to expend for
any repair or restoration of the Premises or Building amounts in excess of insurance proceeds paid to Landlord and available for repair or restoration; and (ii) Tenant shall not have the right to terminate this Lease pursuant to this Section if any damage or destruction was caused by the gross negligence or willful and wrongful act of Tenant, its agent or employees. Whether or not the Lease is terminated pursuant to this Article Fourteen, in no event shall Tenant be entitled to any compensation or damages for loss of the use of the whole or any part of the Premises or for any inconvenience or annoyance occasioned by any such damage, destruction, rebuilding or restoration of the Premises or the Building or access thereto.

(f) Any repair or restoration of the Premises performed by Tenant shall be in accordance with the provisions of Article Nine hereof.

14.02 INSUBSTANTIAL UNTENANTABILITY

Unless this Lease is terminated as provided in the preceding Subsections 14.01 (a) and (b), then Landlord shall proceed to repair and restore the Premises other than Tenant Additions, with reasonable promptness, unless such damage is to the Premises and occurs during the last six (6) months of the Term, in which event either Tenant or Landlord shall have the right to terminate this Lease as of the date of such casualty by giving written notice thereof to the other within twenty (20) days after the date of such casualty. Notwithstanding the foregoing, Landlord's obligation to repair shall be limited in accordance with the provisions of Section 14.01 above.

14.03 RENT ABATEMENT

Except for (i) the willful and wrongful act of Tenant or its agents, employees, contractors or invitees, or (ii) the gross negligence of Tenant or its agents, employees, contractors or invitees only if and to the extent Landlord receives rental abatement insurance proceeds covering abatement of the Rent hereunder, then, if all or any part of the Premises are rendered untenantable by fire or other casualty and this Lease is not terminated, Monthly Base Rent and Rent Adjustments shall abate for that part of the Premises which is untenantable on a per diem basis from the date of the casualty until Landlord has Substantially Completed the repair and restoration work in the Premises which it is required to perform, provided, that as a result of such casualty, Tenant does not occupy the portion of the Premises which is untenantable during such period.

14.04 WAIVER OF STATUTORY REMEDIES

The provisions of this Lease, including this Article Fourteen, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, the Premises or the Property or any part of either, and any Law, including Sections 1932(2), 1933(4), 1941 and 1942 of the California Civil Code, with respect to any rights or obligations concerning damage or destruction shall have no application to this Lease or to any damage to or destruction of all or any part of the Premises or the Property or any part of either, and are hereby waived.

ARTICLE FIFTEEN

EMINENT DOMAIN

15.01 TAKING OF WHOLE OR SUBSTANTIAL PART

In the event the whole or any substantial part of the Building or of the Premises is taken or condemned by any competent authority for any public use or purpose (including a deed given in lieu of condemnation) and is thereby rendered untenantable, this Lease shall terminate as of the date title vests in such authority or any earlier date on which possession is required to be surrendered to such authority, and Monthly Base Rent and Rent Adjustments shall be apportioned as of the Termination Date. Further, if at least twenty-five percent (25%) of the rentable area of the Project is taken or condemned by any competent authority for any public use or purpose (including a deed given in lieu of condemnation), and
15.02 TAKING OF PART

In the event a part of the Premises is taken or condemned by any competent authority (or a deed is delivered in lieu of condemnation) and this Lease is not terminated, the Lease shall be amended to reduce or increase, as the case may be, the Monthly Base Rent and Tenant's Share to reflect the Rentable Area of the Premises or Building, as the case may be, remaining after any such taking or condemnation. Landlord, upon receipt and to the extent of the award in condemnation (or proceeds of sale) shall make necessary repairs and restorations to the Premises (exclusive of Tenant Additions) and to the Building to the extent necessary to constitute the portion of the Building not so taken or condemned as a complete architectural and economically efficient unit. Notwithstanding the foregoing, if as a result of any taking, or a governmental order that the grade of any street or alley adjacent to the Building is to be changed and such taking or change of grade makes it necessary or desirable to substantially remodel or restore the Building or prevents the economical operation of the Building, Landlord shall have the right to terminate this Lease upon ninety (90) days prior written notice to Tenant.

15.03 COMPENSATION

Landlord shall be entitled to receive the entire award (or sale proceeds) from any such taking, condemnation or sale without any payment to Tenant, and Tenant hereby assigns to Landlord Tenant's interest, if any, in such award; provided, however, Tenant shall have the right separately to pursue against the condemning authority a separate award in respect of the loss, if any, to Tenant Additions paid for by Tenant without any credit or allowance from Landlord, for fixtures or personal property of Tenant, or for relocation or business interruption expenses, so long as there is no diminution of Landlord's award as a result.

ARTICLE SIXTEEN

INSURANCE

16.01 TENANT'S INSURANCE

Tenant, at Tenant's expense, agrees to maintain in force, with a company or companies acceptable to Landlord, during the Term: (a) Commercial General Liability Insurance on a primary basis and without any right of contribution from any insurance carried by Landlord covering the Premises on an occurrence basis against all claims for personal injury, bodily injury, death and property damage, including contractual liability covering the indemnification provisions in this Lease. Such insurance shall be for such limits that are reasonably required by Landlord from time to time but not less than a combined single limit of Five Million and No/100 Dollars ($5,000,000.00); (b) Workers' Compensation and Employers' Liability Insurance to the extent required by and in accordance with the Laws of the State of California; (c) "All Risks" property insurance in an amount adequate to cover the full replacement cost of all Tenant Additions to the Premises, equipment, installations, fixtures and contents of the Premises in the event of loss; (d) In the event a motor vehicle is to be used by Tenant in connection with its business operation from the Premises, Comprehensive Automobile Liability Insurance coverage with limits of not less than Three
Million and No/100 Dollars ($3,000,000.00) combined single limit coverage against bodily injury liability and property damage liability arising out of the use by or on behalf of Tenant, its agents and employees in connection with this Lease, of any owned, non-owned or hired motor vehicles; and (e) such other insurance or coverages as Landlord reasonably requires.

16.02 FORM OF POLICIES

Each policy referred to in 16.01 shall satisfy the following requirements. Each policy shall (i) name Landlord and the Indemnitees as additional insureds (except Workers’ Compensation and Employers’ Liability Insurance), (ii) be issued by one or more responsible insurance companies licensed to do business in the State of California reasonably satisfactory to Landlord, (iii) where applicable, provide for deductible amounts satisfactory to Landlord and not permit co-insurance, (iv) shall provide that such insurance may not be canceled or amended without thirty (30) days' prior written notice to the Landlord, and (v) each policy of "All-Risks" property insurance shall provide that the policy shall not be invalidated should the insured waive in writing prior to a loss, any or all rights of recovery against any other party for losses covered by such policies. Tenant shall deliver to Landlord, certificates of insurance and at Landlord's request, copies of all policies and renewals thereof to be maintained by Tenant hereunder, not less than ten (10) days prior to the Commencement Date and not less than ten (10) days prior to the expiration date of each policy.

16.03 LANDLORD'S INSURANCE

Landlord agrees to purchase and keep in full force and effect during the Term hereof, including any extensions or renewals thereof, insurance under policies issued by insurers of recognized responsibility, qualified to do business in the State of California on the Building in amounts not less than the greater of eighty (80%) percent of the then full replacement cost (without depreciation) of the Building (above foundations and excluding Tenant Additions to the Premises) or an amount sufficient to prevent Landlord from becoming a co-insurer under the terms of the applicable policies, against fire and such other risks as may be included in standard forms of all risk coverage insurance reasonably available from time to time. Landlord agrees to maintain in force during the Term, Commercial General Liability Insurance covering the Building on an occurrence basis against all claims for personal injury, bodily injury, death and property damage. Such insurance shall be for a combined single limit of Five Million and No/100 Dollars ($5,000,000.00). Neither Landlord's obligation to carry such insurance nor the carrying of such insurance shall be deemed to be an indemnity by Landlord with respect to any claim, liability, loss, cost or expense due, in whole or in part, to Tenant's negligent acts or omissions or willful misconduct. Without obligation to do so, Landlord may, in its sole discretion from time to time, carry insurance in amounts greater and/or for coverage additional to the coverage and amounts set forth above.

16.04 WAIVER OF SUBROGATION

(a) Landlord agrees that, if obtainable at no, or minimal, additional cost, and so long as the same is permitted under the laws of the State of California, it will include in its "All Risks" policies appropriate clauses pursuant to which the insurance companies (i) waive all right of subrogation against Tenant with respect to losses payable under such policies and/or (ii) agree that such policies shall not be invalidated should the insured waive in writing prior to a loss any or all right of recovery against any party for losses covered by such policies.

(b) Tenant agrees to include, if obtainable at no, or minimal, additional cost, and so long as the same is permitted under the laws of the State of California, in its "All Risks" insurance policy or policies on Tenant Additions to the Premises, whether or not removable, and on Tenant's furniture, furnishings, fixtures and other property removable by Tenant under the provisions of this Lease appropriate clauses pursuant to which the insurance company or companies (i) waive the right of subrogation against Landlord and/or any tenant of space in the Building with respect to losses payable under such policy or policies and/or (ii) agree that such policy or policies shall not be invalidated should
the insured waive in writing prior to a loss any or all right of recovery against any party for losses covered by such policy or policies. If Tenant is unable to obtain in such policy or policies either of the clauses described in the preceding sentence, Tenant shall, if legally possible and without necessitating a change in insurance carriers, have Landlord named in such policy or policies as an additional insured. If Landlord shall be named as an additional insured in accordance with the foregoing, Landlord agrees to endorse promptly to the order of Tenant, without recourse, any check, draft, or order for the payment of money representing the proceeds of any such policy or representing any other payment growing out of or connected with said policies, and Landlord does hereby irrevocably waive any and all rights in and to such proceeds and payments.

(c) Provided that Landlord's right of full recovery under its policy or policies aforesaid is not adversely affected or prejudiced thereby, Landlord hereby waives any and all right of recovery which it might otherwise have against Tenant, its servants, agents and employees, for loss or damage occurring to the Real Property and the fixtures, appurtenances and equipment therein, except Tenant Additions, to the extent the same is covered by Landlord's insurance, notwithstanding that such loss or damage may result from the negligence or fault of Tenant, its servants, agents or employees. Provided that Tenant's right of full recovery under its aforesaid policy or policies is not adversely affected or prejudiced thereby, Tenant hereby waives any and all right of recovery which it might otherwise have against Landlord, its servants, and employees and against every other tenant in the Real Property who shall have executed a similar waiver as set forth in this Section 16.04 (c) for loss or damage to Tenant Additions, whether or not removable, and to Tenant's furniture, furnishings, fixtures and other property removable by Tenant under the provisions hereof to the extent the same is covered or coverable by Tenant's insurance required under this Lease, notwithstanding that such loss or damage may result from the negligence or fault of Landlord, its servants, agents or employees, or such other tenant and the servants, agents or employees thereof.

(d) Landlord and Tenant hereby agree to advise the other promptly if the clauses to be included in their respective insurance policies pursuant to subparagraphs (a) and (b) above cannot be obtained on the terms hereinbefore provided and thereafter to furnish the other with a certificate of insurance or copy of such policies showing the naming of the other as an additional insured, as aforesaid. Landlord and Tenant hereby also agree to notify the other promptly of any cancellation or change of the terms of any such policy which would affect such clauses or naming. All such policies which name both Landlord and Tenant as additional insureds shall, to the extent obtainable, contain agreements by the insurers to the effect that no act or omission of any additional insured will invalidate the policy as to the other additional insureds.

16.05 NOTICE OF CASUALTY

Tenant shall give Landlord notice in case of a fire or accident in the Premises promptly after Tenant is aware of such event.

ARTICLE SEVENTEEN

WAIVER OF CLAIMS AND INDEMNITY

17.01 WAIVER OF CLAIMS

To the extent permitted by Law, Tenant releases the Indemnitees from, and waives all claims for, damage to person or property sustained by the Tenant or any occupant of the Premises or the Property resulting directly or indirectly from any existing or future condition, defect, matter or thing in and about the Premises or the Property, or any part of either, or any equipment or appurtenance therein, or resulting from any accident in or about the Premises or the Property, or resulting directly or indirectly from any act or neglect of any tenant or occupant of the Property or of any other person, including Landlord's agents and servants, except to the extent caused by the gross negligence or willful and wrongful act of any of the Indemnitees. If any such damage, whether to the Premises or the Property or any part of either, or whether to Landlord or to other tenants in the Property, results from any act or neglect of Tenant, its
employees, servants, agents, contractors, invitees or customers, Tenant shall be liable therefor and Landlord may, at Landlord's option, repair such
damage and Tenant shall, upon demand by Landlord, as payment of additional Rent hereunder, reimburse Landlord within ten (10) days of demand
for the total cost of such repairs, in excess of amounts, if any, paid to Landlord under insurance covering such damages. Tenant shall not be liable
for any such damage caused by its acts or neglect to the extent that Landlord or a tenant has recovered any amount of the damage from proceeds
of insurance policies and the insurance company has waived its right of subrogation against Tenant.

17.02 INDEMNITY BY TENANT

To the extent permitted by Law, Tenant hereby indemnifies, and agrees to protect, defend and hold the Indemnitees harmless, against any and all
actions, claims, demands, liability, costs and expenses, including reasonable attorneys' fees and expenses for the defense thereof, arising from
Tenant's occupancy of the Premises, from the undertaking of any Tenant Additions or repairs to the Premises, from the conduct of Tenant's
business on the Premises, or from any breach or default on the part of Tenant in the performance of any covenant or agreement on the part of
Tenant to be performed pursuant to the terms of this Lease, or from any willful act or negligence of Tenant, its agents, contractors, servants,
employees, customers or invitees, in or about the Premises or the Property or any part of either. In case of any action or proceeding brought against
the Indemnitees by reason of any such claim, upon notice from Landlord, Tenant covenants to defend such action or proceeding by counsel chosen
by Landlord, in Landlord's sole discretion. Landlord reserves the right to settle, compromise or dispose of any and all actions, claims and demands
related to the foregoing indemnity. The foregoing indemnity shall not operate to relieve an Indemnitee of liability to the extent such liability is caused
by the gross negligence or willful and wrongful act of such Indemnitee. Further, the foregoing indemnity is subject to and shall not diminish any
waivers in effect in accordance with Section 16.04 by Landlord or its insurers to the extent of amounts, if any, paid to Landlord under its "All-Risks"
property insurance.

17.03 WAIVER OF CONSEQUENTIAL DAMAGES

To the extent permitted by law, Tenant hereby waives and releases the Indemnitees from any consequential damages, compensation or claims for
inconvenience or loss of business, rents or profits as a result of any injury or damage, whether or not caused by the willful and wrongful act of any of
the Indemnitees.

ARTICLE EIGHTEEN

RULES AND REGULATIONS

18.01 RULES

Tenant agrees for itself and for its subtenants, employees, agents, and invitees to comply with all reasonable rules and regulations for use of the
Premises, the Phase and the Project imposed by Landlord, as the same may be revised from time to time, including the following: (a) Tenant shall
comply with all of the requirements of Landlord's emergency response plan, as the same may be amended from time to time; and (b) Tenant shall
not place any furniture, furnishings, fixtures or equipment in the Premises in a manner so as to obstruct the windows of the Premises to cause the
Building, in Landlord's good faith determination, to appear unsightly from the exterior. Such rules and regulations are and shall be imposed for the
cleanliness, good appearance, proper maintenance, good order and reasonable use of the Premises, the Phase and the Project and as may be
necessary for the enjoyment of the Project by all tenants and their clients, customers, and employees.

18.02 ENFORCEMENT

Nothing in this Lease shall be construed to impose upon the Landlord any duty or obligation to enforce the rules and regulations as set forth above
or as hereafter adopted, or the terms, covenants or conditions
of any other lease as against any other tenant, and the Landlord shall not be liable to the Tenant for violation of the same by any other tenant, its servants, employees, agents, visitors or licensees. Landlord shall use reasonable efforts to enforce the rules and regulations of the Building in a uniform and non-discriminatory manner.

ARTICLE NINETEEN
LANDLORD'S RESERVED RIGHTS

Landlord shall have the following rights exercisable without notice to Tenant and without liability to Tenant for damage or injury to persons, property or business and without being deemed an eviction or disturbance of Tenant's use or possession of the Premises or giving rise to any claim for offset or abatement of Rent: (1) to change the Building's name or street address upon thirty (30) days' prior written notice to Tenant; (2) to install, affix and maintain all signs on the exterior and/or interior of the Building; (3) to designate and/or approve prior to installation, all types of signs, window shades, blinds, drapes, awnings or other similar items, and all internal lighting that may be visible from the exterior of the Premises; (4) upon reasonable notice to Tenant, to display the Premises to prospective purchasers at reasonable hours at any time during the Term and to prospective tenants at reasonable hours during the last twelve (12) months of the Term; (5) to grant to any party the exclusive right to conduct any business or render any service in or to the Building, provided such exclusive right shall not operate to prohibit Tenant from using the Premises for the purpose permitted hereunder; (6) to change the arrangement and/or location of entrances or passageways, doors and doorways, corridors, elevators, stairs, washrooms or public portions of the Building, and to close entrances, doors, corridors, elevators or other facilities, provided that such action shall not materially and adversely interfere with Tenant's access to the Premises; (7) to have access for Landlord to any mail chutes and boxes located in or on the Premises as required by any applicable rules of the United States Post Office; and (8) to close the Building after Standard Operating Hours, except that Tenant and its employees and invitees shall be entitled to admission at all times, under such regulations as Landlord prescribes for security purposes.

ARTICLE TWENTY
ESTOPPEL CERTIFICATE

20.01 IN GENERAL

Within fifteen (15) days after request therefor by Landlord, Mortgagee or any prospective mortgagee or owner, Tenant agrees as directed in such request to execute an Estoppel Certificate in recordable form, binding upon Tenant, certifying (i) that this Lease is unmodified and in full force and effect (or if there have been modifications, a description of such modifications and that this Lease as modified is in full force and effect); (ii) the dates to which Rent has been paid; (iii) that Tenant is in the possession of the Premises if that is the case; (iv) that Landlord is not in default under this Lease, or, if Tenant believes Landlord is in default, the nature thereof in detail; (v) that Tenant has no offsets or defenses to the performance of its obligations under this Lease (or if Tenant believes there are any offsets or defenses, a full and complete explanation thereof); (vi) that the Premises have been completed in accordance with the terms and provisions hereof, that Tenant has accepted the Premises and the condition thereof and of all improvements thereto and has no claims against Landlord or any other party with respect thereto; (vii) if an assignment of rents or leases has been served upon the Tenant by a Mortgagee, Tenant will acknowledge receipt thereof and agree to be bound by the provisions thereof; (viii) that Tenant will give to the Mortgagee copies of all notices required or permitted to be given by Tenant to Landlord; and (ix) to any other information reasonably requested.

20.02 ENFORCEMENT

In the event that Tenant fails to deliver an Estoppel Certificate within three (3) business days after Tenant has received notice from Landlord of Tenant's failure to deliver an Estoppel Certificate within the time prescribed in Section 20.01 above, then such failure shall be a Default for which there shall be no
additional cure or grace period. In addition to any other remedy available to Landlord, Landlord may impose a charge equal to $500.00 for each day that Tenant fails to deliver an Estoppel Certificate and Tenant shall be deemed to have irrevocably appointed Landlord as Tenant's attorney-in-fact to execute and deliver the subject Estoppel Certificate that Tenant has failed to deliver.

ARTICLE TWENTY-ONE

REAL ESTATE BROKERS

Landlord and Tenant represent to each other that in connection with this Lease they are represented by Tenant's Broker identified in Section 1.01(19) and Landlord's Broker identified in Section 1.01(19), and that except for Tenant's Broker and Landlord's Broker, neither has dealt with any real estate broker, sales person, or finder in connection with this Lease, and no such person initiated or participated in the negotiation of this Lease. Landlord and Tenant hereby indemnify and agree to protect, defend and hold the other harmless from and against all claims, losses, damages, liability, costs and expenses (including, without limitation, reasonable attorneys' fees and expenses) by virtue of any broker, agent or other person claiming a commission or other form of compensation by virtue of alleged representation of, or dealings or discussions with, Landlord or Tenant, as applicable, with respect to the subject matter of this Lease, except for Landlord's Broker and except for a commission payable to Tenant's Broker to the extent provided for in a separate written agreement between Tenant's Broker and Landlord's Broker. Tenant is not obligated to pay or fund any amount to Landlord's Broker, and Landlord hereby agrees to pay such commission, if any, to which Landlord's Broker is entitled in connection with the subject matter of this Lease pursuant to Landlord's separate written agreement with Landlord's Broker. Such commission shall include an amount to be shared by Landlord's Broker with Tenant's Broker to the extent that Tenant's Broker and Landlord's Broker have entered into a separate agreement between themselves to share the commission paid to Landlord's Broker by Landlord. The provisions of this Section shall survive the expiration or earlier termination of the Lease.

ARTICLE TWENTY-TWO

MORTGAGEE PROTECTION

23.01 SUBORDINATION AND ATTORNMENT

This Lease is and shall be expressly subject and subordinate at all times to (i) any ground or underlying lease of the Real Property, now or hereafter existing, and all amendments, extensions, renewals and modifications to any such lease, and (ii) the lien of any mortgage or trust deed now or hereafter encumbering fee title to the Real Property and/or the leasehold estate under any such lease, and all amendments, extensions, renewals, replacements and modifications of such mortgage or trust deed and/or the obligation secured thereby, unless such ground lease or ground lessor, or mortgage, trust deed or Mortgagee, expressly provides or elects that the Lease shall be superior to such lease or mortgage or trust deed. If any such mortgage or trust deed is foreclosed (including any sale of the Real Property pursuant to a power of sale), or if any such lease is terminated, upon request of the Mortgagee or ground lessor, as the case may be, Tenant shall attorn to the purchaser at the foreclosure sale or to the ground lessor under such lease, as the case may be, provided, however, that such purchaser or ground lessor shall not be (i) bound by any payment of Rent for more than one month in advance except payments in the nature of security for the performance by Tenant of its obligations under this Lease; (ii) subject to any offset, defense or damages arising out of a default of any obligations of any preceding Landlord; or (iii) bound by any amendment or modification of this Lease made without the written consent of the Mortgagee or ground lessor; or (iv) liable for any security deposits not actually received in cash by such purchaser or ground lessor. This subordination shall be self-operative and no further certificate or instrument of subordination need be required by any such Mortgagee or ground lessor. In confirmation of such subordination, however, Tenant shall execute promptly any reasonable certificate or instrument that
Landlord, Mortgagee or ground lessor may request. Tenant hereby constitutes Landlord as Tenant's attorney-in-fact to execute such certificate or instrument for and on behalf of Tenant upon Tenant's failure to do so within fifteen (15) days of a request to do so. Upon request by such successor in interest, Tenant shall execute and deliver reasonable instruments confirming the attornment provided for herein.

23.02 MORTGAGEE PROTECTION

Tenant agrees to give any Mortgagee or ground lessor, by registered or certified mail, a copy of any notice of default served upon the Landlord by Tenant, provided that prior to such notice Tenant has received notice (by way of service on Tenant of a copy of an assignment of rents and leases, or otherwise) of the address of such Mortgagee or ground lessor. Tenant further agrees that if Landlord shall have failed to cure such default within the time provided for in this Lease, then the Mortgagee or ground lessor shall have an additional thirty (30) days after receipt of notice thereof within which to cure such default or if such default cannot be cured within that time, then such additional notice time as may be necessary, if, within such thirty (30) days, any Mortgagee or ground lessor has commenced and is diligently pursuing the remedies necessary to cure such default (including commencement of foreclosure proceedings or other proceedings to acquire possession of the Real Property, if necessary to effect such cure). Such period of time shall be extended by any period within which such Mortgagee or ground lessor is prevented from commencing or pursuing such foreclosure proceedings or other proceedings to acquire possession of the Real Property by reason of Landlord's bankruptcy. Until the time allowed as aforesaid for Mortgagee or ground lessor to cure such defaults has expired without cure, Tenant shall have no right to, and shall not, terminate this Lease on account of default. This Lease may not be modified or amended so as to reduce the Rent or shorten the Term, or so as to adversely affect in any other respect to any material extent the rights of the Landlord, nor shall this Lease be canceled or surrendered, without the prior written consent, in each instance, of the ground lessor or the Mortgagee.

ARTICLE TWENTY-FOUR

NOTICES

(a) All notices, demands or requests provided for or permitted to be given pursuant to this Lease must be in writing and shall be personally delivered, sent by Federal Express or other reputable overnight courier service, or mailed by first class, registered or certified United States mail, return receipt requested, postage prepaid.

(b) All notices, demands or requests to be sent pursuant to this Lease shall be deemed to have been properly given or served by delivering or sending the same in accordance with this Section, addressed to the parties hereto at their respective addresses listed in Sections 1.01(2) and (3).

(c) Notices, demands or requests sent by mail or overnight courier service as described above shall be effective upon deposit in the mail or with such courier service. However, the time period in which a response to any such notice, demand or request must be given shall commence to run from (i) in the case of delivery by mail, the date of receipt on the return receipt of the notice, demand or request by the addressee thereof, or (ii) in the case of delivery by Federal Express or other overnight courier service, the date of acceptance of delivery by an employee, officer, director or partner of Landlord or Tenant. Rejection or other refusal to accept or the inability to deliver because of changed address of which no notice was given, as indicated by advice from Federal Express or other overnight courier service or by mail return receipt, shall be deemed to be receipt of notice, demand or request sent. Notices may also be served by personal service upon any officer, director or partner of Landlord or Tenant, and shall be effective upon such service.

(d) By giving to the other party at least thirty (30) days written notice thereof, either party shall have the right from time to time during the term of this Lease to change their respective addresses for notices, statements, demands and requests, provided such new address shall be within the United States of America.
ARTICLE TWENTY-FIVE

EXERCISE FACILITY

Tenant agrees to inform all employees of Tenant of the following: (i) the exercise facility is available for the use of the employees of tenants of the Project only and for no other person; (ii) use of the facility is at the risk of Tenant or Tenant's employees, and all users must sign a release; (iii) the facility is unsupervised; and (iv) users of the facility must report any needed equipment maintenance or any unsafe conditions to the Landlord immediately. Landlord may discontinue providing such facility at Landlord's sole option at any time without incurring any liability. As a condition to the use of the exercise facility, Tenant and each of Tenant's employees that uses the exercise facility shall first sign a written release in form and substance acceptable to Landlord. Landlord may change the rules and/or hours of the exercise facility at any time, and Landlord reserves the right to deny access to the exercise facility to anyone due to misuse of the facility or noncompliance with rules and regulations of the facility. To the extent permitted by Law, Tenant hereby indemnifies, and agrees to protect, defend and hold the Indemnitees harmless, against any and all actions, claims, demands, liability, costs and expenses, including reasonable attorneys' fees and expenses for the defense thereof, arising from use of the exercise facility in the Project by Tenant, Tenant's employees or invitees, except to the extent due to the gross negligence or willful and wrongful act of Landlord or Indemnitees. In case of any action or proceeding brought against the Indemnitees by reason of any such claim, upon notice from Landlord, Tenant covenants to defend such action or proceeding by counsel chosen by Landlord, in Landlord's sole discretion. Landlord reserves the right to settle, compromise or dispose of any and all actions, claims and demands related to the foregoing indemnity.

ARTICLE TWENTY-SIX

OFAC

Landlord advises Tenant hereby that the purpose of this Article is to provide to the Landlord information and assurances to enable Landlord to comply with the law relating to OFAC.

Tenant hereby represents, warrants and covenants to Landlord, either that (i) Tenant is regulated by the SEC, FINRA or the Federal Reserve (a "Regulated Entity") or (ii) neither Tenant nor any person or entity that directly or indirectly (a) controls Tenant or (b) has an ownership interest in Tenant of twenty-five percent (25%) or more, appears on the list of Specially Designated Nationals and Blocked Persons ("OFAC List") published by the Office of Foreign Assets Control ("OFAC") of the U.S. Department of the Treasury.

If, in connection with this Lease, there is one or more Guarantors of Tenant's obligations under this Lease, then Tenant further represents, warrants and covenants either that (i) any such Guarantor is a Regulated Entity or (ii) neither Guarantor nor any person or entity that directly or indirectly (a) controls such Guarantor or (b) has an ownership interest in such Guarantor of twenty-five percent (25%) or more, appears on the OFAC List.

Tenant covenants that during the term of this Lease to provide to Landlord information reasonably requested by Landlord including without limitation, organizational structural charts and organizational documents which Landlord may deem to be necessary ("Tenant OFAC Information") in order for Landlord to confirm Tenant's continuing compliance with the provisions of this Article. Tenant represents and warrants that the Tenant OFAC Information it has provided or to be provided to Landlord or Landlord's Broker in connection with the execution of this Lease is true and complete.

ARTICLE TWENTY-SEVEN

MISCELLANEOUS

27.01 LATE CHARGES
The Monthly Base Rent, Rent Adjustments and Rent Adjustment Deposits shall be due when and as specifically provided above. Except for such payments and late charges described below, which late charge shall be due when provided below (without notice or demand), all other payments required hereunder to Landlord shall be paid within ten (10) days after Landlord's demand therefor. All Rent and charges, except late charges, not paid when due shall bear interest from the date due until the date paid at the Default Rate in effect on the date such payment was due.

In the event Tenant is more than five (5) days late in paying any installment of Rent due under this Lease, Tenant shall pay Landlord a late charge equal to five percent (5%) of the delinquent installment of Rent. The parties agree that (i) such delinquency will cause Landlord to incur costs and expenses not contemplated herein, the exact amount of which will be difficult to calculate, including the cost and expense that will be incurred by Landlord in processing each delinquent payment of rent by Tenant, and (ii) the amount of such late charge represents a reasonable estimate of such costs and expenses and that such late charge shall be paid to Landlord for each delinquent payment in addition to all Rent otherwise due hereunder. The parties further agree that the payment of late charges and the payment of interest provided for in subparagraph (a) above are distinct and separate from one another in that the payment of interest is to compensate Landlord for its inability to use the money improperly withheld by Tenant, while the payment of late charges is to compensate Landlord for its additional administrative expenses in handling and processing delinquent payments.

Payment of interest at the Default Rate and/or of late charges shall not excuse or cure any default by Tenant under this Lease, nor shall the foregoing provisions of this Article or any such payments prevent Landlord from exercising any right or remedy available to Landlord upon Tenant’s failure to pay Rent when due, including the right to terminate this Lease.

27.02 NO JURY TRIAL; VENUE; JURISDICTION

Each party hereto (which includes any assignee, successor, heir or personal representative of a party) shall not seek a jury trial, hereby waives trial by jury, and hereby further waives any objection to venue in the County in which the Project is located, and agrees and consents to personal jurisdiction of the courts of the State of California, in any action or proceeding or counterclaim brought by any party hereto against the other on any matter whatsoever arising out of or in any way connected with this Lease, the relationship of Landlord and Tenant, Tenant’s use or occupancy of the Premises, or any claim of injury or damage, or the enforcement of any remedy under any statute, emergency or otherwise, whether any of the foregoing is based on this Lease or on tort law. No party will seek to consolidate any such action in which a jury has been waived with any other action in which a jury trial cannot or has not been waived. It is the intention of the parties that these provisions shall be subject to no exceptions. By execution of this Lease the parties agree that this provision may be filed by any party hereto with the clerk or judge before whom any action is instituted, which filing shall constitute the written consent to a waiver of jury trial pursuant to and in accordance with Section 631 of the California Code of Civil Procedure. No party has in any way agreed with or represented to any other party that the provisions of this Section will not be fully enforced in all instances. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

27.03 DEFAULT UNDER OTHER LEASE

It shall be a Default under this Lease if Tenant or any Affiliate holding any other lease with Landlord for premises in the Project defaults under such lease and as a result thereof such lease is terminated or terminable.

27.04 OPTION
This Lease shall not become effective as a lease or otherwise until executed and delivered by both Landlord and Tenant. The submission of the Lease to Tenant does not constitute a reservation of or option for the Premises, but when executed by Tenant and delivered to Landlord, the Lease shall constitute an irrevocable offer by Tenant in effect for fifteen (15) days to lease the Premises on the terms and conditions herein contained.

27.05 TENANT AUTHORITY

Tenant represents and warrants to Landlord that it has full authority and power to enter into and perform its obligations under this Lease, that the person executing this Lease is fully empowered to do so, and that no consent or authorization is necessary from any third party. Landlord may request that Tenant provide Landlord evidence of Tenant's authority.

27.06 ENTIRE AGREEMENT

This Lease, the Exhibits and Riders attached hereto contain the entire agreement between Landlord and Tenant concerning the Premises and there are no other agreements, either oral or written, and no other representations or statements, either oral or written, on which Tenant has relied. This Lease shall not be modified except by a writing executed by Landlord and Tenant.

27.07 MODIFICATION OF LEASE FOR BENEFIT OF MORTGAGEE

If Mortgagee of Landlord requires a modification of this Lease which shall not result in any increased cost or expense to Tenant or in any other material and adverse change in the rights and obligations of Tenant hereunder, then Tenant agrees that the Lease may be so modified.

27.08 EXCULPATION

Tenant agrees, on its behalf and on behalf of its successors and assigns, that any liability or obligation of Landlord in connection with this Lease shall only be enforced against Landlord's equity interest in the Property up to a maximum of Five Million Dollars ($5,000,000.00) and in no event against any other assets of the Landlord, or Landlord's officers or directors or partners, and that any liability of Landlord with respect to this Lease shall be so limited and Tenant shall not be entitled to any judgment in excess of such amount.

27.09 ACCORD AND SATISFACTION

No payment by Tenant or receipt by Landlord of a lesser amount than any installment or payment of Rent due shall be deemed to be other than on account of the amount due, and no endorsement or statement on any check or any letter accompanying any check or payment of Rent shall be deemed an accord and satisfaction, and Landlord may accept such check or payment without prejudice to Landlord's right to recover the balance of such installment or payment of Rent or pursue any other remedies available to Landlord. No receipt of money by Landlord from Tenant after the termination of this Lease or Tenant's right of possession of the Premises shall reinstate, continue or extend the Term. Receipt or acceptance of payment from anyone other than Tenant, including an assignee of Tenant, is not a waiver of any breach of Article Ten, and Landlord may accept such payment on account of the amount due without prejudice to Landlord's right to pursue any remedies available to Landlord.

27.10 LANDLORD'S OBLIGATIONS ON SALE OF BUILDING

In the event of any sale or other transfer of the Building, Landlord shall be entirely freed and relieved of all agreements and obligations of Landlord hereunder accruing or to be performed after the date of such sale or transfer (provided, however, that Landlord shall not be freed and relieved of its obligation for reimbursement of the Security to Tenant unless Landlord has transferred to such transferee the unapplied
balance of Tenant's Security held by Landlord at such time), and any remaining liability of Landlord with respect to this Lease shall be limited to Five Million Dollars ($5,000,000.00) and Tenant shall not be entitled to any judgment in excess of such amount.

27.11 BINDING EFFECT

Subject to the provisions of Article Ten, this Lease shall be binding upon and inure to the benefit of Landlord and Tenant and their respective heirs, legal representatives, successors and permitted assigns.

27.12 CAPTIONS

The Article and Section captions in this Lease are inserted only as a matter of convenience and in no way define, limit, construe, or describe the scope or intent of such Articles and Sections.

27.13 TIME; APPLICABLE LAW; CONSTRUCTION

Time is of the essence of this Lease and each and all of its provisions. This Lease shall be construed in accordance with the Laws of the State of California. If more than one person signs this Lease as Tenant, the obligations hereunder imposed shall be joint and several. If any term, covenant or condition of this Lease or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term, covenant or condition to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby and each item, covenant or condition of this Lease shall be valid and be enforced to the fullest extent permitted by Law. Wherever the term "including" or "includes" is used in this Lease, it shall have the same meaning as if followed by the phrase "but not limited to". The language in all parts of this Lease shall be construed according to its normal and usual meaning and not strictly for or against either Landlord or Tenant.

27.14 ABANDONMENT

In the event Tenant vacates or abandons the Premises but is otherwise in compliance with all the terms, covenants and conditions of this Lease, Landlord shall (i) have the right to enter into the Premises in order to show the space to prospective tenants, (ii) have the right to reduce the services provided to Tenant pursuant to the terms of this Lease to such levels as Landlord reasonably determines to be adequate services for an unoccupied premises and (iii) during the last six (6) months of the Term, have the right to prepare the Premises for occupancy by another tenant upon the end of the Term. Tenant expressly acknowledges that in the absence of written notice pursuant to Section 11.02(b) or pursuant to California Civil Code Section 1951.3 terminating Tenant's right to possession, none of the foregoing acts of Landlord or any other act of Landlord shall constitute a termination of Tenant's right to possession or an acceptance of Tenant's surrender of the Premises, and the Lease shall continue in effect.

27.15 LANDLORD'S RIGHT TO PERFORM TENANT'S DUTIES

If Tenant fails timely to perform any of its duties under this Lease, Landlord shall have the right (but not the obligation), to perform such duty on behalf and at the expense of Tenant without prior notice to Tenant, and all sums expended or expenses incurred by Landlord in performing such duty shall be deemed to be additional Rent under this Lease and shall be due and payable upon demand by Landlord.

27.16 SECURITY SYSTEM

Landlord shall not be obligated to provide or maintain any security patrol or security system. Landlord shall not be responsible for the quality of any such patrol or system which may be provided hereunder or for damage or injury to Tenant, its employees, invitees or others due to the failure, action or inaction of such patrol or system.
27.17 NO LIGHT, AIR OR VIEW EASEMENTS

Any diminution or shutting off of light, air or view by any structure which may be erected on lands of or adjacent to the Project shall in no way affect this Lease or impose any liability on Landlord.

27.18 RECORDATION

Neither this Lease, nor any notice nor memorandum regarding the terms hereof, shall be recorded by Tenant. Any such unauthorized recording shall be a Default for which there shall be no cure or grace period. Tenant agrees to execute and acknowledge, at the request of Landlord, a memorandum of this Lease, in recordable form.

27.19 SURVIVAL

The waivers of the right of jury trial, the other waivers of claims or rights, the releases and the obligations of Tenant under this Lease to indemnify, protect, defend and hold harmless Landlord and/or Indemnitees shall survive the expiration or termination of this Lease, and so shall all other obligations or agreements which by their terms survive expiration or termination of the Lease.

27.20 EXHIBITS OR RIDERS

All exhibits, riders and/or addenda referred to in this Lease as an exhibit, addenda or rider hereto or attached hereto, are hereby incorporated into and made a part of this Lease.

27.21 DISCLOSURE REGARDING CERTIFIED ACCESS SPECIALIST

Pursuant to California Civil Code Section 1938, Landlord hereby notifies Tenant that as of the date of this Lease, the Premises has not undergone inspection by a "Certified Access Specialist" to determine whether the Premises meet all applicable construction-related accessibility standards under California Civil Code Section 55.53.

27.22 UTILITY USAGE INFORMATION

If Tenant is billed directly by a public utility with respect to Tenant's electrical usage at the Premises, then, upon request, Tenant shall provide monthly electrical utility usage for the Premises to Landlord for the period of time requested by Landlord (in electronic or paper format) or, at Landlord's option, provide any written authorization or other documentation required for Landlord to request information regarding Tenant's electricity usage with respect to the Premises directly from the applicable utility company.

[SIGNATURE PAGE FOLLOWS]
IN WITNESS WHEREOF, this Lease has been executed as of the date set forth in Section 1.01(4) hereof.

TENANT:

GENOMIC HEALTH, INC.,
a Delaware corporation

By /s/ Kim Popovits

Kim Popovits

Print name

Its President & CEO

(Chairman of Board, President or Vice President)

By /s/ Brad Cole

Brad Cole

Print name

Its COO & CFO

(Secretary, Assistant Secretary, CFO or Assistant Treasurer)

LANDLORD:

METROPOLITAN LIFE INSURANCE COMPANY,
a New York corporation

By Greg Hill

Greg Hill

Print name

Its Director

Rider 2 - 46
This First Amendment to Lease ("Amendment") is entered into, and dated for reference purposes, as of September 5, 2006 (the "Execution Date") by and between METROPOLITAN LIFE INSURANCE COMPANY, a New York corporation ("Metropolitan"), as Landlord ("Landlord"), and GENOMIC HEALTH, INC., a Delaware corporation ("Genomic"), as Tenant ("Tenant"), with reference to the following facts ("Recitals"): A. Landlord and Tenant are parties to that certain written lease comprised of the following: that certain written Lease, dated as of September 23, 2005 entered into by and between Landlord and Tenant, for certain premises described therein, which as of the Execution Date consists of the entire Rentable Area of the Building (with an address of 301 Penobscot Drive, Redwood City, California 94063) (the "Existing Lease"), all as more particularly described in the Existing Lease, B. Landlord and Tenant desire to provide for a modification of certain provisions of the Lease as to the type and scope of HVAC units to be replaced by Tenant, and as to Landlord's obligation to reimburse Tenant.

NOW, THEREFORE, in consideration of the foregoing, and of the mutual covenants set forth herein and of other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

Section 1. Scope of Amendment; Defined Terms. Except as expressly provided in this Amendment, the Existing Lease shall remain in full force and effect. Should any inconsistency arise between this Amendment and the Existing Lease as to the specific matters which are the subject of this Amendment, the terms and conditions of this Amendment shall control. The term "Lease" as used herein and in the Existing Lease shall refer to the Existing Lease as modified by this Amendment, except as expressly provided in this Amendment. All capitalized terms used in this Amendment and not defined herein shall have the meanings set forth in the Existing Lease unless the context clearly requires otherwise.

Section 2. Amendment of Certain Lease Provisions.

(a) Amendment and Restatement of Section 1.03, Definition of Operating Expenses. Landlord and Tenant acknowledge and agree that the text of subsection (p) of the last sentence of the definition of Operating Expenses set forth in Section 1.03 of the Existing Lease is hereby amended and restated in its entirety to read as follows:

"(p) any and all costs of the acquisition and installation of no less than 200 tons of HVAC as described in Section 8.03 below;"

(b) Amendment and Restatement of Section 8.03. Landlord and Tenant acknowledge and agree that text of Section 8.03 of the Existing Lease is hereby amended and restated in its entirety to read as follows:

"Prior to January 13, 2009, Tenant shall, subject to reimbursement by Landlord on the schedule provided below, replace all the rooftop HVAC units serving the Building with new equipment of good quality (which includes all rooftop units for heating and/or air conditioning, certain associated controls and ductwork, and related materials and expenses), sufficient to provide HVAC service and cooling capacity for the entire Building (no less than 200 tons of HVAC cooling capacity in the aggregate), but in such mixture of non-specialized and specialized HVAC units as shall meet Tenant's needs. Tenant shall pay the cost thereof, subject to partial reimbursement by Landlord on the schedule provided below, which reimbursed amounts shall not be recoverable by Landlord from Tenant as items of Building Operating Expenses. Tenant shall control the work and schedule for the replacement of the HVAC, subject to the requirements set forth herein and Landlord's prior written approval, which shall not be unreasonably withheld, of
the following: (a) the vendors and contractors to supply and install such HVAC, and Landlord and Tenant agree that Tenant shall obtain bids from a minimum of three such vendors and contractors; (b) all plans and specifications of and for such HVAC and installation thereof; (c) the cost of such HVAC and installation thereof, but Landlord and Tenant agree that the cost reimbursable to Tenant by Landlord hereunder shall in no event exceed the cost of the HVAC replacement completed prior to the scheduled date of the reimbursement; (d) the contracts for such HVAC and installation thereof, and Landlord and Tenant agree that, among other things, such contracts shall provide for warranties acceptable to Landlord and that such warranties shall: name Landlord and be issued directly for the benefit of and enforceable by Landlord. Tenant shall provide a replacement schedule to Landlord. Notwithstanding the foregoing, in the event Tenant, in its reasonable opinion, determines that it is most efficient or cost-effective to replace all the HVAC at the time that Tenant conducts the Tenant Work pursuant to the Workletter, then Tenant may do so. Landlord and Tenant acknowledge and agree that as of the Execution Date of this Amendment: (a) Tenant has requested approval of, and Landlord has approved, drawings and specifications for the HVAC replacement prepared by Dowler-Gruman Architects captioned as follows: Phase 1 – Office Tenant Improvements Issued for Plan Check Dec. 2, 2005, and Phase 2 – Lab Area Tenant Improvements Issued for Plan Check Feb. 14, 2006; (b) Tenant has requested and obtained bids for such Phase 1 and Phase 2 work from Western Allied Mechanical, Critchfield Mechanical, and Ray Hellwig Mechanical, which contractors are acceptable to Landlord; (c) Western Allied Mechanical is the contractor to whom Tenant has awarded the work for Phase 1 and Phase 2, which is acceptable to Landlord; and (d) for HVAC replacement for the remainder of the Premises: (1) the bids received from Tenant pursuant to clause (b) above included such future HVAC replacement work; (2) the future HVAC replacement work is included in the work that Tenant has contracted with Western Allied Mechanical to perform, which contractor is acceptable to Landlord; and (3) Tenant shall submit further drawings and specifications for such future HVAC replacement for the remainder of the Premises for Landlord's approval. Provided that the HVAC replacement is completed in accordance with the approvals to date (as described above) and future plans, contractor(s) and bid(s) as described above and hereafter approved, and provided that the total, actual cost of the HVAC replacement is at least One Million Two Hundred Thousand Dollars ($1,200,000), Landlord shall reimburse Tenant a total of Six Hundred Forty-eight Thousand Three Hundred Ninety-nine Dollars ($648,399) payable in three (3) installments of Two Hundred Sixteen Thousand One Hundred Thirty-three Dollars ($216,133) each, which installments shall be payable on March 13, 2007, March 13, 2008 and March 13, 2009. In the event that the total, actual cost of the HVAC replacement is less than One Million Two Hundred Thousand Dollars ($1,200,000), the amounts to be reimbursed to Tenant by Landlord set forth above shall be prorated in relation to the amount that the total, actual costs of HVAC replacement bear to One Million Two Hundred Thousand Dollars ($1,200,000). Provided however, at least thirty (30) days prior to any reimbursement, Tenant shall provide Landlord, with respect to any work for which the following documentation has not previously been provided: (i) a reasonable description of the work, including names of all contractors, subcontractors and vendors providing labor, services or material; (ii) bills and invoices, and proof of payment thereof by Tenant; (iii) valid, unconditional mechanics' lien releases; (iv) applicable warranties; and (v) "As Built" drawings and specifications in the same form as those required under Section 3.5 of the Workletter. The foregoing HVAC Allowance shall be in addition to, and shall not diminish the Tenant's Allowance (as defined in the Workletter). Upon installation, such HVAC shall be deemed to be part of the Building and owned by Landlord."

(c) Amendment and Restatement of Section 3.2(i) of the Workletter. Landlord and Tenant acknowledge and agree that text of Section 3.20 of the Workletter attached as Exhibit B to the Existing Lease is hereby amended and restated in its entirety to read as follows:

"(I) shall not be unreasonably withheld, provided however, that Landlord may disapprove Tenant's Plans in its sole and absolute discretion if they (a) adversely affect the structural integrity of the Building, including applicable floor loading capacity; (b) adversely affect any of the Building
Section 3. Time of Essence. Without limiting the generality of any other provision of the Lease, time is of the essence to each and every term and condition of this Amendment.

Section 4. Attorneys' Fees. Each party to this Amendment shall bear its own attorneys' fees and costs incurred in connection with the discussions preceding, negotiations for and documentation of this Amendment. In the event any party brings any suit or other proceeding with respect to the subject matter or enforcement of this Amendment or the Lease as amended, the provisions of Section 11.03 of the Existing Lease shall apply.

Section 5. Effect of Headings; Recitals; Exhibits. The titles or headings of the various parts or sections hereof are intended solely for convenience and are not intended and shall not be deemed to or in any way be used to modify, explain or place any construction upon any of the provisions of this Amendment. Any and all Recitals set forth at the beginning of this Amendment are true and correct and constitute a part of this Amendment as if they had been set forth as covenants herein. Exhibits, schedules, plats and riders hereto which are referred to herein are a part of this Amendment.

Section 6. Entire Agreement; Amendment. This Amendment taken together with the Existing Lease, together with all exhibits, schedules, riders and addenda to each, constitutes the full and complete agreement and understanding between the parties hereto and shall supersede all prior communications, representations, understandings or agreements, if any, whether oral or written, concerning the subject matter contained in this Amendment and the Existing Lease, as so amended, and no provision of the Lease as so amended may be modified, amended, waived or discharged, in whole or in part, except by a written instrument executed by all of the parties hereto.

Section 7. Authority. Each party represents and warrants to the other that it has full authority and power to enter into and perform its obligations under this Amendment, that the person executing this Amendment is fully empowered to do so, and that no consent or authorization is necessary from any third party. Landlord may request that Tenant provide Landlord evidence of Tenant's authority.

Section 8. Counterparts. This Amendment may be executed in two or more counterparts, which when taken together shall constitute one and the same instrument, and the signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. Each counterpart shall be equally admissible in evidence, and each original shall fully bind each party who has executed it. The parties contemplate that they may be executing counterparts of this Amendment transmitted by facsimile and agree and intend that a signature by facsimile machine shall bind the party so signing with the same effect as though the signature were an original signature.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first set forth above.

TENANT: GENOMIC HEALTH, INC.,
a Delaware corporation
By: /s/ Randy Scott

Print Name: Randy Scott

Title: CEO
(Chairman of Board, President or Vice President)

By: /s/ G. Bradley Cole

Print Name: G. Bradley Cole

Title: CFO
(Secretary, Assistant Secretary, CFO or Assistant Treasurer)

LANDLORD: METROPOLITAN LIFE INSURANCE COMPANY,
a New York corporation

By: /s/ Joel Redmon

Print Name: Joel Redmon

Title: Assistant Vice - President
SECOND AMENDMENT TO LEASE

This Second Amendment to Lease ("Amendment" or "Second Amendment") is entered into as of November 30, 2010 (the "Effective Date") by and between METROPOLITAN LIFE INSURANCE COMPANY, a New York corporation, as Landlord ("Landlord"), and GENOMIC HEALTH, INC., a Delaware corporation, as Tenant ("Tenant"), with reference to the following facts ("Recitals"):  

A. Landlord and Tenant are parties to that certain Office Lease dated as of September 23, 2005, as amended by that certain First Amendment to Lease dated as of September 5, 2006, for certain "Premises" consisting of 47,900 square feet of Rentable Area described therein commonly known as 301 Penobscot Drive, Redwood City, California (the "Existing Lease"). The Expiration Date under the Existing Lease is currently February 24, 2012.

B. Landlord and Tenant desire to provide for extension of the Term, amendment of Security, and other amendments of the Existing Lease as more particularly set forth below.

NOW, THEREFORE, in consideration of the foregoing, and of the mutual covenants set forth herein and of other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

Section 1. Scope of Amendment; Defined Terms. Except as expressly provided in this Amendment, the Existing Lease shall remain in full force and effect. Should any inconsistency arise between this Amendment and the Existing Lease as to the specific matters which are the subject of this Amendment, the terms and conditions of this Amendment shall control. The term "Lease" as used herein and, from and after the Effective Date, in the Existing Lease shall refer to the Existing Lease as modified by this Amendment. All capitalized terms used in this Amendment and not defined herein shall have the meanings set forth in the Existing Lease unless the context clearly requires otherwise.

Section 2. Extension of Term; Option to Extend. Notwithstanding any provision of the Existing Lease to the contrary, (a) the Term is hereby extended for the period of eighty-five (85) months and seven (7) days (the "Extended Term") commencing on February 25, 2012 (the "Extension Commencement Date") and expiring March 31, 2019 (hereafter, the "Expiration Date" in lieu of the date provided in the Existing Lease), unless sooner terminated pursuant to the terms of the Lease; (b) the Option to Extend set forth in Section 4 of Rider 2 of the Existing Lease shall apply to extend the Extended Term instead of the initial Term, with the following modifications to such Section 4: (i) the phrase "Extended Term" is inserted in place of references to "Term," and (ii) Expiration Date shall mean the Expiration Date of the Extended Term; and (c) Exhibit C (Site Plan of Project) shall instead be the Site Plan set forth in Exhibit A hereto. Landlord and Tenant agree that this Section 2 is intended to provide all rights and obligations of the parties with respect to extension of the Term, and that any and all other extension or renewal rights, whether in the Existing Lease or otherwise, are hereby cancelled and of no further force or effect for any purpose.

Section 3. Monthly Base Rent for Extended Term. Section 1.01(8) of the Basic Lease Provisions of the Existing Lease is hereby amended to add at the end thereof the following: "Notwithstanding any provision of the Lease to the contrary, commencing on the Extension Commencement Date and continuing through the Expiration Date of the Extended Term (as such terms are defined in the Second Amendment), the amount of Monthly Base Rent due and payable by Tenant for the Premises shall be as follows:

Period from Extension Commencement
Section 4. “AS IS” Condition. Notwithstanding any provision of the Existing Lease to the contrary, Tenant hereby leases for the Extended Term and accepts the Premises in its “AS IS” condition existing on the Effective Date, without any express or implied representations or warranties of any kind by Landlord, its brokers, manager or agents, or the employees of any of them regarding the Premises; and Landlord shall not have any obligation to construct or install any tenant improvements or alterations or to pay for any such construction or installation. Tenant acknowledges that Tenant presently occupies and has occupied the Premises since the Commencement Date of the Existing Lease.

Section 5. Amendment of Security. Notwithstanding Section 1.01(14) or any other provision of the Existing Lease to the contrary, from and after the Effective Date, “Security” shall instead mean cash in the amount of Three Hundred Seventeen Thousand Four Hundred Thirty-Two and 82/100 Dollars ($317,432.82). Tenant shall deposit the cash Security with Landlord concurrently with its execution of this Amendment and upon such deposit of the cash Security, Landlord shall return to Tenant the Letter of Credit being held as Security under the Existing Lease. All references to the amount of the Letter of Credit under Article Five shall be replaced with the amount of the Security set forth in this Section 5.

Section 6. OFAC. Landlord advises Tenant hereby that the purpose of this Section is to provide to the Landlord information and assurances to enable Landlord to comply with the law relating to OFAC.

Tenant hereby represents, warrants and covenants to Landlord, either that (i) Tenant is regulated by the SEC, FINRA or the Federal Reserve (a "Regulated Entity") or (ii) neither Tenant nor any person or entity that directly or indirectly (a) controls Tenant or (b) has an ownership interest in Tenant of twenty-five percent (25%) or more, appears on the list of Specially Designated Nationals and Blocked Persons ("OFAC List") published by the Office of Foreign Assets Control ("OFAC") of the U.S. Department of the Treasury.

If, in connection with the Lease, there is one or more Guarantors of Tenant's obligations under the Lease, then Tenant further represents, warrants and covenants either that (i) any such Guarantor is a Regulated Entity or (ii) neither Guarantor nor any person or entity that directly or indirectly (a) controls such Guarantor or (b) has an ownership interest in such Guarantor of twenty-five percent (25%) or more, appears on the OFAC List.

Tenant covenants that during the term of the Lease to provide to Landlord information reasonably requested by Landlord including without limitation, organizational structural charts and organizational documents which Landlord may deem to be necessary ("Tenant OFAC Information") in order for Landlord to confirm Tenant's continuing compliance with the provisions of this Section. Tenant represents and warrants that the Tenant OFAC Information it has provided or to be provided to Landlord or Landlord's Broker in connection with the execution of this Amendment is true and complete.

Section 7. Ratification. Tenant represents to Landlord, as of the Effective Date, that: (a) the Lease is in full force and effect, has not been modified except as provided by this Amendment, and represents the entire agreement between the parties as to the Premises; (b) there are no uncured defaults or unfulfilled obligations on the part of Landlord to Tenant's best knowledge after due inquiry; (c) Tenant is in possession of the entire Premises and has not transferred, assigned or sublet any portion thereof, and neither the Premises, nor any part thereof, is occupied.
by any subtenant or other party other than Tenant; and (d) to Tenant's best knowledge after due inquiry, there are no existing defenses or offsets that Tenant has against Landlord.

Section 8. Notices; Change of Address. Section 1.01(2) of the Basic Lease Provisions of the Existing Lease is hereby amended to provide that the current addresses for notices to be sent to Landlord pursuant to Section 1.01(2) of the Basic Lease Provisions of the Lease are as follows:

Notices to Landlord shall be addressed:

Metropolitan Life Insurance Company
do Seaport Centre Project Manager
701 Chesapeake Drive, Suite 800
Redwood City, CA 94063

with copies to the following:

Metropolitan Life Insurance Company
425 Market Street, Suite 1050
San Francisco, CA 94105
Attention: EIM, Director

and

Metropolitan Life Insurance Company
425 Market Street, Suite 1050
San Francisco, CA 94105
Attention: Associate General Counsel

Section 9. Brokers. Notwithstanding any other provision of the Existing Lease to the contrary, Tenant represents that in connection with this Amendment it is represented by GVA Kidder Mathews ("Tenant's Broker") and, except for Tenant's Broker and Cornish & Carey Commercial ("Landlord's Broker"), Tenant has not dealt with any real estate broker, sales person, or finder in connection with this Amendment, and no such person initiated or participated in the negotiation of this Amendment. Tenant hereby indemnifies and agrees to protect, defend and hold Landlord and Landlord's Broker harmless from and against all claims, losses, damages, liability, costs and expenses (including, without limitation, attorneys' fees and expenses) by virtue of any broker, agent or other person claiming a commission or other form of compensation by virtue of alleged representation of, or dealings or discussions with, Tenant with respect to the subject matter of this Amendment, except for Landlord's Broker and except for a commission payable to Tenant's Broker to the extent provided for in a separate written agreement between Tenant's Broker and Landlord's Broker. Tenant is not obligated to pay or fund any amount to Landlord's Broker, and Landlord hereby agrees to pay such commission, if any, to which Landlord's Broker is entitled in connection with the subject matter of this Amendment pursuant to Landlord's separate written agreement with Landlord's Broker. Such commission shall include an amount to be shared by Landlord's Broker with Tenant's Broker to the extent that Tenant's Broker and Landlord's Broker have entered into a separate agreement between themselves to share the commission paid to Landlord's Broker by Landlord. The provisions of this Section shall survive the expiration or earlier termination of the Lease.

Section 10. Time of Essence. Without limiting the generality of any other provision of the Lease, time is of the essence to each and every term and condition of this Amendment.

Section 11. Attorneys' Fees. Each party to this Amendment shall bear its own attorneys' fees and costs incurred in connection with the discussions preceding, negotiations for and documentation of this Amendment. In the event any party brings any suit or other proceeding with respect to the subject matter or enforcement of this Amendment or the Lease as amended, the provisions of Section 11.03 of the Existing Lease shall apply.
Section 12. Effect of Headings; Recitals; Exhibits. The titles or headings of the various parts or sections hereof are intended solely for convenience and are not intended and shall not be deemed to or in any way be used to modify, explain or place any construction upon any of the provisions of this Amendment. Any and all Recitals set forth at the beginning of this Amendment are true and correct and constitute a part of this Amendment as if they had been set forth as covenants herein. Exhibits, schedules, plats and riders hereto which are referred to herein are a part of this Amendment.

Section 13. Entire Agreement; Amendment. This Amendment taken together with the Existing Lease, together with all exhibits, schedules, riders and addenda to each, constitutes the full and complete agreement and understanding between the parties hereto and shall supersede all prior communications, representations, understandings or agreements, if any, whether oral or written, concerning the subject matter contained in this Amendment and the Existing Lease, as so amended, and no provision of the Lease as so amended may be modified, amended, waived or discharged, in whole or in part, except by a written instrument executed by all of the parties hereto.

Section 14. Authority. Tenant represents and warrants to Landlord that it has full authority and power to enter into and perform its obligations under this Amendment, that the person executing this Amendment is fully empowered to do so, and that no consent or authorization is necessary from any third party. Landlord may request that Tenant provide Landlord evidence of Tenant’s authority.

Section 15. Counterparts. This Amendment may be executed in duplicates or counterparts, or both, and such duplicates or counterparts together shall constitute but one original of the Amendment, and the signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. Each duplicate and counterpart shall be equally admissible in evidence, and each original shall fully bind each party who has executed it.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the Effective Date.

TENANT: GENOMIC HEALTH, INC.,
a Delaware corporation

By: /s/ Randy Scott

Print Name: Randy Scott
Title: Executive Chairman
(Chairman of Board, President or Vice President)

By: /s/ G. Bradley Cole

Print Name: G. Bradley Cole
Title: COO & CFO
(Secretary, Assistant Secretary, CFO or Assistant Treasurer)

LANDLORD: METROPOLITAN LIFE INSURANCE COMPANY,
a New York corporation

By: /s/ Joel Redmon

Print Name: Joel Redmon
Title: Regional Director
THIRD AMENDMENT TO LEASE

This Third Amendment to Lease ("Amendment") is entered into, and dated for reference purposes, as of November 11, 2015 (the "Execution Date") by and between METROPOLITAN LIFE INSURANCE COMPANY, a New York corporation ("Landlord"), and GENOMIC HEALTH, INC., a Delaware corporation ("Tenant"), with reference to the following facts ("Recitals"): A. Landlord and Tenant are the parties to that certain lease which is comprised of the following (collectively, the "Existing Lease"): that certain Lease, dated September 23, 2005, entered into by and between Tenant, as tenant and Landlord, as landlord ("Original Lease"); as amended by that certain First Amendment to Lease, dated September 5, 2006, and that certain Second Amendment to Lease, dated November 30, 2010 (the "Second Amendment"), for certain "Premises" described therein containing approximately 47,900 rentable square feet of the Building (located at 301 Penobscot Drive, Redwood City, California), all as more particularly described in the Existing Lease.

B. Landlord and Tenant desire to provide for (i) the extension of the Term of the Existing Lease; and (ii) other amendments of the Existing Lease as more particularly set forth below.

NOW, THEREFORE, in consideration of the foregoing, and of the mutual covenants set forth herein and of other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1. SCOPE OF AMENDMENT; DEFINED TERMS. Except as expressly provided in this Amendment, the Existing Lease shall remain in full force and effect. Should any inconsistency arise between this Amendment and the Existing Lease as to the specific matters which are the subject of this Amendment, the terms and conditions of this Amendment shall control. All capitalized terms used in this Amendment and not defined herein shall have the meanings set forth in the Existing Lease unless the context clearly requires otherwise; provided, however, that the term "Lease" as used herein and, from and after the Execution Date, in the Existing Lease shall refer to the Existing Lease as modified by this Amendment.

SECTION 2. EXTENSION OF TERM. Landlord and Tenant acknowledge and agree that, notwithstanding any provision of the Existing Lease to the contrary, the current Term pursuant to the Existing Lease will expire on March 31, 2019, and that the Term of the Lease is hereby extended for the period of forty-eight (48) months (the "Second Extended Term") commencing on April 1, 2019 (the "Second Extension Commencement Date") and expiring March 31, 2023 (hereafter, the "Expiration Date" in lieu of the date provided in the Existing Lease), unless sooner terminated or extended pursuant to the terms of the Lease. Landlord and Tenant acknowledge and agree that the Option to Extend set forth in Section 4 of Rider 2 to the Original Lease, as amended by Section 2 of the Second Amendment shall apply to the Second Extended Term, and (i) the phrase "Second Extended Term" is inserted in place of reference to the "Extended Term" in the Option to Extend, and (ii) the Expiration Date shall mean the Expiration Date of the Second Extended Term.

SECTION 3. MONTHLY BASE RENT FOR SECOND EXTENDED TERM. Notwithstanding any provision of the Existing Lease to the contrary, commencing on the Second Extension Commencement Date and continuing through the Expiration Date of the Second Extended Term, the amount of Monthly Base Rent payable by Tenant for the Premises shall be as follows:
<table>
<thead>
<tr>
<th>Period from/to</th>
<th>Monthly Base Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 1, 2019 to March 31, 2020</td>
<td>$145,616.00</td>
</tr>
<tr>
<td>April 1, 2020 to March 31, 2021</td>
<td>$149,984.48</td>
</tr>
<tr>
<td>April 1, 2021 to March 31, 2022</td>
<td>$154,484.01</td>
</tr>
<tr>
<td>April 1, 2022 to March 31, 2023</td>
<td>$159,118.53</td>
</tr>
</tbody>
</table>

SECTION 4. TENANT’S SHARE; BASE YEAR. During the Second Extended Term, Tenant shall pay all additional Rent payable under the Lease, including Tenant's Share of Operating Expenses. Notwithstanding any provisions of the Existing Lease to the contrary, Tenant's Building Share shall continue to be 100.00%, Tenant's Phase Share shall continue to be 20.3293%, and Tenant's Project Share shall continue to be 8.9126%.

SECTION 5. “AS IS” CONDITION.

(a) Condition of Premises. Notwithstanding any provision of the Existing Lease to the contrary, Tenant hereby leases for the Second Extended Term and accepts the Premises in its "AS IS" condition existing on the Execution Date, without any express or implied representations or warranties of any kind by Landlord, its brokers, manager or agents, or the employees of any of them regarding the Premises; and Landlord shall not have any obligation to construct or install any tenant improvements or alterations or to pay for any such construction or installation, except as expressly set forth in this Section 5.

(b) Tenant Work Generally. Landlord and Tenant acknowledge and agree that notwithstanding any provisions of the Existing Lease to the contrary:

(a) Tenant may desire to do certain alterations, additions or improvements in connection with this extension of the Term, and for purposes of this Amendment any such work is referred to as "Tenant Work"; (b) all Tenant Work, if any, shall be done subject to and in compliance with this Amendment, and except to the extent modified by or inconsistent with the express provisions of this Amendment, pursuant to the provisions of Article 9 of the Original Lease applicable to such Tenant Alterations; (c) without limiting the generality of any provisions of Article Nine, Tenant's selection of Tenant's space planner and/or architect ("Tenant's Architect") and Tenant's selection of a general contractor shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld or delayed; (d) all plans and specifications prepared by Tenant's space planner or architect shall be subject to review by Landlord's architect and to Landlord's prior written approval, which shall not be unreasonably withheld or delayed beyond ten (10) business days with respect to any initial submissions, change orders, and any revisions thereto; (e) Tenant shall retain one or more engineers reasonably satisfactory to Landlord and licensed by the State of California to prepare structural, mechanical, and electrical working drawings and specifications for all Premises improvements, not included in, or requiring any changes to the HVAC, fire and/or life safety, mechanical and electrical work; (f) if the Tenant Work does not exceed the amount of the Allowance (as defined below), Tenant shall not be required to obtain a completion and lien indemnity bond for the Tenant Work; (g) such work, including all design, plan review, obtaining all approvals and permits, and construction shall be at Tenant's sole cost and expense (subject to reimbursement to the extent of the Allowance), including delivery to Landlord of plans and specifications of such Tenant Work (including an as-built mylar and digitized (to the extent available) set of as-built plans and specifications upon completion) to the extent such work is more than recarpeting and/or repainting, and (h) Tenant shall pay Landlord a fee ("Construction Monitoring Fee") for monitoring such design, construction and work by Tenant equal to two percent (2%) of the Allowance, which fee shall be paid by Landlord applying two percent (2%) of the Allowance in payment thereof.

(c) Design & Construction Responsibility for any Tenant Work. Tenant shall be responsible for the suitability for the Tenant's needs and business of the design and function of all Tenant Work and for its construction in compliance with (i) all laws, rules, orders, ordinances, directions, regulations and requirements of all governmental authorities, agencies, offices, departments, bureaus and boards having jurisdiction thereof, (ii) all rules, orders, directions, regulations and requirements of the Pacific Fire Rating Bureau, or of any similar insurance body or bodies, and (iii) all rules and regulations of Landlord (collectively, referred to herein as “Laws”). Without
SECTION 6. LIMITATION OF LIABILITY. Notwithstanding any provision of the Existing Lease to the contrary, Tenant agrees, on its behalf and on behalf of its successors and assigns, that any liability or obligation of Landlord in connection with this Lease shall only be enforced against Landlord's equity interests in the Building up to a maximum of Five Million and 00/100 Dollars ($5,000,000.00) and in no event against any other assets of the Landlord, or Landlord's officers or directors or partners, and that any liability of Landlord with respect to this Lease shall be so limited and Tenant shall not be entitled to any judgment in excess of such amount.

SECTION 7. TIME OF ESSENCE. Without limiting the generality of any other provision of the Existing Lease, time is of the essence to each and every term and condition of this Amendment.

SECTION 8. BROKERS. Notwithstanding any other provision of the Existing Lease to the contrary, Tenant represents that in connection with this Amendment it is represented by Kidder Mathews (“Tenant’s Broker”) and, except for Tenant's Broker and Landlord's Broker identified below, Tenant has not dealt with any real estate broker, sales person, or finder in connection with this Amendment, and no such person initiated or participated in the negotiation of this Amendment. Tenant hereby indemnifies and agrees to protect, defend and hold Landlord and Newmark Cornish & Carey (“Landlord’s Broker”) harmless from and against all claims, losses, damages, liability, costs and expenses (including, without limitation, attorneys' fees and expenses) by virtue of any broker, agent or other person claiming a commission or other form of compensation by virtue of alleged representation of, or
dealings or discussions with, Tenant with respect to the subject matter of this Amendment, except for Landlord's Broker. Tenant is not obligated to pay or fund any amount to Landlord's Broker, and Landlord hereby agrees to pay such commission, if any, to which Landlord's Broker is entitled in connection with the subject matter of this Amendment pursuant to Landlord's separate written agreement with Landlord's Broker. The provisions of this Section shall survive the expiration or earlier termination of the Lease.

SECTION 9. ATTORNEYS’ FEES. Each party to this Amendment shall bear its own attorneys' fees and costs incurred in connection with the discussions preceding, negotiations for and documentation of this Amendment. In the event that either party brings any suit or other proceeding with respect to the subject matter or enforcement of this Amendment or the Lease, the parties acknowledge and agree that the provisions of Section 11.03 of the Original Lease shall apply.

SECTION 10. EFFECT OF HEADINGS; RECITALS; EXHIBITS. The titles or headings of the various parts or sections hereof are intended solely for convenience and are not intended and shall not be deemed to or in any way be used to modify, explain or place any construction upon any of the provisions of this Amendment. Any and all Recitals set forth at the beginning of this Amendment are true and correct and constitute a part of this Amendment as if they had been set forth as covenants herein. Exhibits, schedules, plats and riders hereto which are referred to herein are a part of this Amendment.

SECTION 11. ENTIRE AGREEMENT; AMENDMENT. This Amendment taken together with the Existing Lease, together with all exhibits, schedules, riders and addenda to each, constitutes the full and complete agreement and understanding between the parties hereto and shall supersede all prior communications, representations, understandings or agreements, if any, whether oral or written, concerning the subject matter contained in this Amendment and the Existing Lease, as so amended, and no provision of the Lease as so amended may be modified, amended, waived or discharged, in whole or in part, except by a written instrument executed by all of the parties hereto.

SECTION 12. OFAC. Landlord advises Tenant hereby that the purpose of this Section is to provide to the Landlord information and assurances to enable Landlord to comply with the law relating to OFAC.

Tenant hereby represents, warrants and covenants to Landlord, either that (i) Tenant is regulated by the SEC, FINRA or the Federal Reserve (a “Regulated Entity”) or (ii) neither Tenant nor any person or entity that directly or indirectly (a) controls Tenant or (b) has an ownership interest in Tenant of twenty-five percent (25%) or more, appears on the list of Specially Designated Nationals and Blocked Persons (“OFAC List”) published by the Office of Foreign Assets Control (“OFAC”) of the U.S. Department of the Treasury.

If, in connection with the Lease, there is one or more Guarantors of Tenant's obligations under the Lease, then Tenant further represents, warrants and covenants either that (i) any such Guarantor is a Regulated Entity or (ii) neither Guarantor nor any person or entity that directly or indirectly (a) controls such Guarantor or (b) has an ownership interest in such Guarantor of twenty-five percent (25%) or more, appears on the OFAC List.

Tenant covenants that during the term of the Lease to provide to Landlord information reasonably requested by Landlord including without limitation, organizational structural charts and organizational documents which Landlord may deem to be necessary (“Tenant OFAC Information”) in order for Landlord to confirm Tenant's continuing compliance with the provisions of this Section. Tenant represents and warrants that the Tenant OFAC Information it has provided or to be provided to Landlord or Landlord's Broker in connection with the execution of this Amendment is true and complete.

SECTION 13. RATIFICATION. Tenant represents to Landlord that: (a) the Existing Lease is in full force and effect and has not been modified except as provided by this Amendment; (b) as of the Execution Date, there are no uncured defaults or unfulfilled obligations on the part of Landlord or Tenant; and (c) Tenant is currently in possession of the entire Premises as of the Execution Date, and neither the Premises, nor any part thereof, is occupied by any subtenant or other party other than Tenant.
SECTION 14. AUTHORITY. Each party represents and warrants to the other that it has full authority and power to enter into and perform its obligations under this Amendment, that the person executing this Amendment is fully empowered to do so, and that no consent or authorization is necessary from any third party. Landlord may request that Tenant provide Landlord evidence of Tenant's authority.

SECTION 15. DISCLOSURE REGARDING CERTIFIED ACCESS SPECIALIST. Pursuant to California Civil Code Section 1938, Landlord hereby notifies Tenant that as of the date of this Amendment, the Premises has not undergone inspection by a "Certified Access Specialist" to determine whether the Premises meet all applicable construction-related accessibility standards under California Civil Code Section 55.53.

SECTION 16. ENERGY UTILITY USAGE. If Tenant is billed directly by a public utility with respect to Tenant's energy usage at the Premises, then, upon request, Tenant shall provide monthly energy utility usage for the Premises to Landlord for the period of time requested by Landlord (in electronic or paper format) or, at Landlord's option, provide any written authorization or other documentation required for Landlord to request information regarding Tenant's energy usage with respect to the Premises directly from the applicable utility company.

SECTION 17. COUNTERPARTS. This Amendment may be executed in duplicates or counterparts, or both, and such duplicates or counterparts together shall constitute but one original of the Amendment, and the signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. Each duplicate and counterpart shall be equally admissible in evidence, and each original shall fully bind each party who has executed it.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first set forth above.

TENANT: GENOMIC HEALTH, INC.,
a Delaware corporation

By: /s/ Kim Popovits

Print Name: Kim Popovits
Title: President & CEO
(Chairman of Board, President or Vice President)

By: /s/ Brad Cole

Print Name: Brad Cole
Title: COO & CFO
(Secretary, Assistant Secretary, CFO or Assistant Treasurer)

LANDLORD: METROPOLITAN LIFE INSURANCE COMPANY,
a New York corporation

By: /s/ Greg Hill

Print Name: Greg Hill
Title: Director
FOURTH AMENDMENT TO LEASE

This Fourth Amendment to Lease ("Amendment") is entered into, and dated for reference purposes, as of October 4, 2019 (the “Execution Date”) by and between METROPOLITAN LIFE INSURANCE COMPANY, a New York corporation ("Landlord"), and GENOMIC HEALTH, INC., a Delaware corporation ("Tenant"), with reference to the following facts ("Recitals"): 

A. Landlord and Tenant are the parties to that certain lease which is comprised of the following (collectively, the “Existing Lease”): that certain Lease, dated September 23, 2005, entered into by and between Tenant, as tenant and Landlord, as landlord ("Original Lease"); as amended by that certain First Amendment to Lease, dated September 5, 2006, and that certain Second Amendment to Lease, dated November 30, 2010 (the “Second Amendment”) and that certain Third Amendment to Lease, dated as of November 11, 2015 (the “Third Amendment”), for certain “Premises” described therein containing approximately 47,900 rentable square feet of the Building (located at 301 and 351 Penobscot Drive, Redwood City, California), all as more particularly described in the Existing Lease.

B. Landlord and Tenant desire to provide for (i) the extension of the Term of the Existing Lease; and (ii) other amendments of the Existing Lease as more particularly set forth below.

NOW, THEREFORE, in consideration of the foregoing, and of the mutual covenants set forth herein and of other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1. SCOPE OF AMENDMENT; DEFINED TERMS. Except as expressly provided in this Amendment, the Existing Lease shall remain in full force and effect. Should any inconsistency arise between this Amendment and the Existing Lease as to the specific matters which are the subject of this Amendment, the terms and conditions of this Amendment shall control. All capitalized terms used in this Amendment and not defined herein shall have the meanings set forth in the Existing Lease unless the context clearly requires otherwise; provided, however, that the term “Lease” as used herein and, from and after the Execution Date, in the Existing Lease shall refer to the Existing Lease as modified by this Amendment.

SECTION 2. EXTENSION OF TERM. Landlord and Tenant acknowledge and agree that, notwithstanding any provision of the Existing Lease to the contrary, the current Term pursuant to the Existing Lease will expire on March 31, 2023, and that the Term of the Lease is hereby extended for the period of seventy-two (72) months (the “Third Extended Term”) commencing on April 1, 2023 (the “Third Extension Commencement Date”) and expiring March 31, 2029 (hereafter, the “Expiration Date” in lieu of the date provided in the Existing Lease), unless sooner terminated or extended pursuant to the terms of the Lease. Landlord and Tenant acknowledge and agree that the Option to Extend set forth in Section 4 of Rider 2 to the Existing Lease, as amended by Section 2 of the Second Amendment and Section 2 of the Third Amendment, shall apply to the Third Extended Term, except that (i) the phrase "Third Extended Term" is inserted in place of reference to the "Second Extended Term” in the Option to Extend, and amended, and (ii) the Expiration Date shall mean the Expiration Date of the Third Extended Term.

SECTION 3. MONTHLY BASE RENT FOR THIRD EXTENDED TERM. Notwithstanding any provision of the Existing Lease to the contrary, commencing on the Third Extension Commencement Date and continuing through the Expiration Date of the Third Extended Term, the amount of Monthly Base Rent payable by Tenant for the Premises shall be as follows:

1
<table>
<thead>
<tr>
<th>Period from/to</th>
<th>Monthly Base Rent</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 1, 2023 to March 31, 2024</td>
<td>$236,147.00</td>
</tr>
<tr>
<td>April 1, 2024 to March 31, 2025</td>
<td>$243,231.41</td>
</tr>
<tr>
<td>April 1, 2025 to March 31, 2026</td>
<td>$250,528.35</td>
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<tr>
<td>April 1, 2026 to March 31, 2027</td>
<td>$258,044.20</td>
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<td>April 1, 2027 to March 31, 2028</td>
<td>$265,785.53</td>
</tr>
<tr>
<td>April 1, 2028 to March 31, 2029</td>
<td>$273,759.10</td>
</tr>
</tbody>
</table>

SECTION 4. TENANT’S SHARE. During the Third Extended Term, Tenant shall pay all additional Rent payable under the Lease, including Tenant's Share of Operating Expenses. Notwithstanding any provisions of the Existing Lease to the contrary, Tenant's Building Share shall continue to be 100.00%, Tenant's Phase Share shall continue to be 20.3293%, and Tenant's Project Share shall continue to be 8.9126%.

SECTION 5. “AS IS” CONDITION.

(a) Condition of Premises. Notwithstanding any provision of the Existing Lease to the contrary, Tenant hereby leases for the Third Extended Term and accepts the Premises in its “AS IS” condition existing on the Execution Date, without any express or implied representations or warranties of any kind by Landlord, its brokers, manager or agents, or the employees of any of them regarding the Premises; and Landlord shall not have any obligation to construct or install any tenant improvements or alterations or to pay for any such construction or installation, except as expressly set forth in this Section 5.

(b) Tenant Work Generally. Landlord and Tenant acknowledge and agree that notwithstanding any provisions of the Existing Lease to the contrary:

(a) Tenant may desire to do certain alterations, additions or improvements in connection with this extension of the Term, and for purposes of this Amendment any such work is referred to as "Tenant Work"; (b) all Tenant Work, if any, shall be done subject to and in compliance with this Amendment, and except to the extent modified by or inconsistent with the express provisions of this Amendment, pursuant to the provisions of Article Nine of the Original Lease applicable to such Tenant Alterations; (c) without limiting the generality of any provisions of Article Nine, Tenant's selection of Tenant's space planner and/or architect ("Tenant’s Architect") and Tenant's selection of a general contractor shall be subject to Landlord's prior written approval, which approval shall not be unreasonably withheld, conditioned or delayed; (d) all plans and specifications prepared by Tenant's space planner or architect shall be subject to review by Landlord's architect and to Landlord's prior written approval, which shall not be unreasonably withheld, conditioned or delayed beyond ten (10) business days with respect to any initial submissions, change orders, and any revisions thereto; (e) Tenant shall retain one or more engineers reasonably satisfactory to Landlord and licensed by the State of California to prepare structural, mechanical, and electrical working drawings and specifications for all Premises improvements, not included in, or requiring any changes to the HVAC, fire and/or life safety, mechanical and electrical work; (f) if the Tenant Work does not exceed the amount of the Allowance (as defined below), Tenant shall not be required to obtain a completion and lien indemnity bond for the Tenant Work; (g) such work, including all design, plan review, obtaining all approvals and permits, and construction shall be at Tenant's sole cost and expense (subject to reimbursement to the extent of the Allowance), including delivery to Landlord of plans and specifications of such Tenant Work (including an as-built mylar and digitized (to the extent available) set of as-built plans and specifications upon completion) to the extent such work is more than recarpeting and/or repainting, and (h) Tenant shall pay Landlord a fee ("Construction Monitoring Fee") for monitoring such design, construction and work by Tenant equal to two percent (2%) of the Allowance, which fee shall be paid by Landlord applying two percent (2%) of the Allowance in payment thereof.

(c) Design & Construction Responsibility for any Tenant Work. Tenant shall be responsible for the suitability for the Tenant's needs and business of the design and function of all Tenant Work and for its construction in compliance with (i) all laws, rules, orders, ordinances, directions, regulations and requirements of all governmental authorities, agencies, offices, departments, bureaus and boards having jurisdiction thereof, (ii) all
rules, orders, directions, regulations and requirements of the Pacific Fire Rating Bureau, or of any similar insurance body or bodies, and (iii) all reasonable rules and regulations of Landlord which have been provided to Tenant in writing (collectively, referred to herein as “Laws”). Without limiting the generality of the foregoing, Landlord and Tenant acknowledge and agree that (a) such Laws include all building codes and regulations, Title 24, and the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12101 et. seq.) and regulations and guidelines promulgated thereunder, as all of the same may be amended and supplemented from time to time (collectively referred to herein as the “ADA”); and (b) in the event that any work by Tenant triggers any upgrades or modifications of existing improvements in the Premises required to comply with Law, Tenant shall also be responsible for such upgrades and modifications, at Tenant's sole cost and expense (subject to reimbursement by Landlord to the extent of the Allowance). Tenant, through Tenant's Architect, shall prepare all architectural plans and specifications, and engineering plans and specifications, for the real property improvements to be constructed by Tenant in the Premises in sufficient detail to be submitted to Landlord for approval, to the extent required pursuant to Article Nine of the Existing Lease and this Amendment, and to be submitted by Tenant for governmental approvals and building permits and to serve as the detailed construction drawings and specifications for the contractor, and shall include, among other things, all partitions, doors, heating, ventilating and air conditioning installation and distribution, ceiling systems, light fixtures, plumbing installations, electrical installations and outlets, telephone installations and outlets, any other installations required by Tenant, fire and life-safety systems, wall finishes and floor coverings, whether to be newly installed or requiring changes from the as-is condition of the Premises as of the date of execution of the Existing Lease. Tenant shall be responsible for the oversight, supervision and construction of all Tenant Work in compliance with this Existing Lease, including compliance with all Laws.

SECTION 6. TIME OF ESSENCE. Without limiting the generality of any other provision of the Existing Lease, time is of the essence to each and every term and condition of this Amendment.

SECTION 7. BROKERS. Notwithstanding any other provision of the Existing Lease to the contrary, Tenant represents that in connection with this Amendment it is represented by Kidder Mathews (“Tenant’s Broker”) and Landlord represents that in connection with this Amendment it is represented by Newmark Cornish & Carey (“Landlord’s Broker”). Except for Tenant's Broker and Landlord's Broker identified below, Tenant has not dealt with any real estate broker, sales person, or finder in connection with this Amendment, and no such person initiated or participated in the negotiation of this Amendment. Each party hereby indemnifies and agrees to protect, defend and hold the other party harmless from and against all claims, losses, damages, liability, costs and expenses (including, without limitation, attorneys' fees and expenses) by virtue of any broker, agent or other person claiming a commission or other form of compensation by virtue of alleged representation of, or dealings or discussions with, the indemnifying party with respect to the subject matter of this Amendment.
Amendment, except for Landlord's Broker and Tenant's Broker. Tenant is not obligated to pay or fund any amount to Landlord's Broker, and Landlord hereby agrees to pay such commission, if any, to which Landlord's Broker is entitled in connection with the subject matter of this Amendment pursuant to Landlord's separate written agreement with Landlord's Broker (which may be shared with Tenant's Broker to the extent that Tenant's Broker and Landlord's Broker have an agreement between themselves to share in such commission). The provisions of this Section shall survive the expiration or earlier termination of the Lease.

SECTION 8. ATTORNEYS' FEES. Each party to this Amendment shall bear its own attorneys' fees and costs incurred in connection with the discussions preceding, negotiations for and documentation of this Amendment. Section 11.03 of the Lease is hereby deleted in its entirety and of no further force and effect.

SECTION 9. EFFECT OF HEADINGS; RECITALS; EXHIBITS. The titles or headings of the various parts or sections hereof are intended solely for convenience and are not intended and shall not be deemed to or in any way be used to modify, explain or place any construction upon any of the provisions of this Amendment. Any and all Recitals set forth at the beginning of this Amendment are true and correct and constitute a part of this Amendment as if they had been set forth as covenants herein. Exhibits, schedules, plats and riders hereto which are referred to herein are a part of this Amendment.

SECTION 10. ENTIRE AGREEMENT; AMENDMENT. This Amendment taken together with the Existing Lease, together with all exhibits, schedules, riders and addenda to each, constitutes the full and complete agreement and understanding between the parties hereto and shall supersede all prior communications, representations, understandings or agreements, if any, whether oral or written, concerning the subject matter contained in this Amendment and the Existing Lease, as so amended, and no provision of the Lease as so amended may be modified, amended, waived or discharged, in whole or in part, except by a written instrument executed by all of the parties hereto.

SECTION 11. OFAC. Landlord advises Tenant hereby that the purpose of this Section is to provide to the Landlord information and assurances to enable Landlord to comply with the law relating to OFAC.

Tenant hereby represents, warrants and covenants to Landlord, either that (i) Tenant is regulated by the SEC, FINRA or the Federal Reserve (a “Regulated Entity”) or (ii) neither Tenant nor any person or entity that directly or indirectly (a) controls Tenant or (b) has an ownership interest in Tenant of twenty-five percent (25%) or more, appears on the list of Specially Designated Nationals and Blocked Persons (“OFAC List”) published by the Office of Foreign Assets Control (“OFAC”) of the U.S. Department of the Treasury.

If, in connection with the Lease, there is one or more Guarantors of Tenant's obligations under the Lease, then Tenant further represents, warrants and covenants either that (i) any such Guarantor is a Regulated Entity or (ii) neither Guarantor nor any person or entity that directly or indirectly (a) controls such Guarantor or (b) has an ownership interest in such Guarantor of twenty-five percent (25%) or more, appears on the OFAC List.

Tenant covenants that during the term of the Lease to provide to Landlord information reasonably requested by Landlord including without limitation, organizational structural charts and organizational documents which Landlord may deem to be necessary (“Tenant OFAC Information”) in order for Landlord to confirm Tenant's continuing compliance with the provisions of this Section. Tenant represents and warrants that the Tenant OFAC Information it has provided or to be provided to Landlord or Landlord's Broker in connection with the execution of this Amendment is true and complete.

SECTION 12. RATIFICATION. Tenant represents to Landlord that: (a) the Existing Lease is in full force and effect and has not been modified except as provided by this Amendment; (b) as of the Execution Date, to Tenant's current, actual knowledge, there are no uncured defaults or unfulfilled obligations on the part of Landlord or Tenant; and (c) Tenant is currently in possession of the entire Premises as of the Execution Date, and neither the Premises, nor any part thereof, is occupied by any subtenant or other party other than Tenant.
SECTION 13.  AUTHORITY. Each party represents and warrants to the other that it has full authority and power to enter into and perform its obligations under this Amendment, that the person executing this Amendment is fully empowered to do so, and that no consent or authorization is necessary from any third party. Landlord may request that Tenant provide Landlord evidence of Tenant's authority.

SECTION 14.  DISCLOSURE REGARDING CERTIFIED ACCESS SPECIALIST. Pursuant to California Civil Code Section 1938, Landlord hereby notifies Tenant that as of the date of this Amendment, the Premises have not undergone inspection by a "Certified Access Specialist" ("CASp") to determine whether the Premises meet all applicable construction-related accessibility standards under California Civil Code Section 55.53. Landlord hereby discloses pursuant to all of the applicable construction-related accessibility standards under state law. Although state law does not require a CASp inspection of the subject premises, the commercial property owner or lessor may not prohibit the lessee or tenant from obtaining a CASp inspection of the subject premises for the occupancy or potential occupancy of the lessee or tenant, if requested by the lessee or tenant. The parties shall mutually agree on the arrangements for the time and manner of the CASp inspection, the payment of the fee for the CASp inspection, and the cost of making any repairs necessary to correct violations of construction-related accessibility standards within the premises. Landlord and Tenant hereby acknowledge and agree that in the event that Tenant elects to perform a CASp inspection of the Premises hereunder (the "Inspection"), such Inspection shall be performed at Tenant's sole cost and expense, limited to the Premises and performed by a CASp who has been approved or designated by Landlord prior to the Inspection. Any Inspection must be performed in a manner which minimizes the disruption of business activities in the Building, and at a time reasonably approved by Landlord. Landlord reserves the right to be present during the Inspection. Tenant agrees to: (i) promptly provide to Landlord a copy of the report or certification prepared by the CASp inspector upon request (the "Report"), and (ii) keep the information contained in the Report confidential, except to the extent required by Law, or to the extent disclosure is needed in order to complete any necessary modifications or improvements required to comply with all applicable accessibility standards under state or federal Law, as well as any other repairs, upgrades, modifications or alterations required by the Report or that may be otherwise required to comply with applicable Laws or accessibility requirements (the “Access Improvements”). If Tenant performs and Inspection, Tenant shall be solely responsible for the cost of Access Improvements to the Premises or the Building necessary to correct any such violations of construction-related accessibility standards identified by such Inspection as required by Law, which Access Improvements may, at Landlord's option, be performed in whole or in part by Landlord at Tenant's expense, payable as Additional Rent within ten (10) days following Landlord's demand.

SECTION 15.  NO CANNABIS. Tenant shall not bring upon the Premises or any portion of the [Project] or use the Premises or permit the Premises or any portion thereof to be used for the growing, manufacturing, administration, distribution (including without limitation, any retail sales), possession, use or consumption of any cannabis, marijuana or cannabinoid product or compound, regardless of the legality or illegality of the same.

SECTION 16.  COUNTERPARTS. This Amendment may be executed in duplicates or counterparts, or both, and such duplicates or counterparts together shall constitute but one original of the Amendment, and the signature of any party to any counterpart shall be deemed a signature to, and may be appended to, any other counterpart. Each duplicate and counterpart shall be equally admissible in evidence, and each original shall fully bind each party who has executed it.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first set forth above.

TENANT: GENOMIC HEALTH, INC., a Delaware corporation

By: /s/ Kimberly Popovits

Print Name: Kimberly Popovits
Title: CEO  
(Chairman of Board, President or Vice President)

By: /s/ Frederic Pla

Print Name: Frederic Pla

Title: COO  
(Secretary, Assistant Secretary, CFO or Assistant Treasurer)

LANDLORD: METROPOLITAN LIFE INSURANCE COMPANY,  
a New York corporation

By: MetLife Investment Management, LLC,  
a Delaware limited liability company,  
its investment manager

By: /s/ Leland Low

Print Name: Leland Low

Title: Director
EMPLOYMENT AGREEMENT

between

Genomic Health International Sàrl (the "Company")
Quai du Seujet 10
1201 Genève
SWITZERLAND

and

Torsten Hoof
Luegetenstrasse 26
6313 Menzingen (Zug)
Switzerland

Article 1
Job Title, Reporting Line and Function

1.1 Title

The Company will employ the Employee as Senior Vice President, International.

1.2 Reporting

The Employee will report to the Chief Commercial Officer, or such other person as designated by the Company in its sole discretion.

1.3 Function

The Employee is responsible for the following duties, as well as any other tasks that the Company may request of the Employee within the limits of his or her skills and training:

• Develop & implement a comprehensive international strategic plan which includes assay sales and revenues, product prioritization, direct presence and distributor strategies, customer/patient focus and the localization strategy for each market.

• Provide oversight and guidance to the European country leaders, managers for international (Canada, Asia Pacific and Latin America), reimbursement & marketing functions and other functions supporting the International business to maximize our international opportunities with current and future products.

• Utilize the Profit and Loss statement for leading long term decision making and meeting quarterly targets.

• Provide direction and input for our overall product strategy for ex-US including what products to make, how to deliver them, how to optimize and evolve our business model and leverage potential partnerships to expand our reach and capabilities.

• Lead efforts across International Market Access & Reimbursement, including liaising with Government Affairs, & Reimbursement teams.
• Lead the continued expansion of Genomic Health into new partnerships and markets. This includes overseeing the brand and launch plans for current and new products; preparing and planning for launch of future products, and ensuring alignment of all International plans with US initiatives.

• Ensure local Medical Affairs activities & initiatives are fully integrated into International commercialization efforts.

• Drive to establish shared best-in-class practices across the International organization.

• Oversee the strategic development of the international KOL network to further expand Genomic Health's bench of KOLs and product portfolio presence across international markets.

• Promote a high performance and cohesive team working approach across the international team as well as in collaboration with cross functional teams throughout GHI Functions as a role model and fosters Genomic Health culture and core values of community, truth-seeking, being ahead of the curve and winning.

• Ensure close alignment with Legal, Compliance and Regulatory teams to ensure prudent business practices, firm adherence to healthcare compliance requirements, and to develop and implement a proactive regulatory strategy supporting future business success.

The Employee will work to the best of the Employee's ability and act at all times in good faith and in the best interest of the Company, its affiliates and subsidiaries.

The Employee may not engage in any external professional activities, whether or not remunerated, without the Company's prior written approval.

Article 2
Duration

2.1 Starting Date and Duration
This Agreement comes into effect on 1 September 2017 (the "Starting Date").

2.2 Probation Period
The first three (3) months of employment will be considered a probation period.

2.3 Duration of Employment
This Agreement is of indefinite duration and will continue in effect unless or until either party terminates this Agreement by providing six months' notice.

The Employee's employment will terminate automatically and without notice on the last day of the month in which the Employee reaches the statutory retirement age.

2.4 Termination for Cause
This Agreement may be terminated without prior notice and with immediate effect by either party for any valid reasons within the meaning of Art. 337 of the Swiss Code of Obligations.

Article 3
Place of Work and Travel
3.1 The Employee's place of work is the Company's offices in Geneva, located at Quai du Seujet 10, 1201 Genève, Switzerland.

The Company may in its discretion assign the Employee to work at any other location in Switzerland.

The Employee may be required to travel for business reasons domestically or internationally. The Company will reimburse the Employee's travel expenses in accordance with the Company's written travel policy, as modified from time to time in the Company's sole discretion.

Article 4
Reimbursement of Expenses

4.1 Reimbursement of professional expenses will be subject to the presentation of appropriate justifications and in accordance with the Company's expense reimbursement policies and procedures.

Article 5
Working Time and Overtime

5.1 Working Rate

The Employee will work at one hundred percent (100%) of full time.

5.2 Working Time

The Employee acknowledges that he will occupy a senior management position (fonction dirigeante élevée) in the sense of article 3d of the Labor Act of 13 March 1964 (Loi sur le travail du 13 mars 1964), and that for this reason the provisions of the Act do not apply to the performance of this Agreement.

Article 6
Remuneration

6.1 Salary and Variable Compensation

The Company will pay Employee a gross base salary at the full-time rate of CHF 385'000 per annum (the "Base Salary"), subject to statutory deductions. The Base Salary is payable in equal monthly installments by bank transfer to a bank account in Switzerland designated by the Employee. The Company will provide the Employee with a monthly written salary statement mentioning all salary deductions.

The Employee may be entitled to annual variable compensation of an indicative value of 40% of the Base Salary, subject to statutory deductions, if any, if and only to the extent that the conditions fixed in the Genomic Health Corporate Bonus Plan (as amended from time to time in the Company's sole discretion) are satisfied.

Unless otherwise expressly agreed upon in a separate writing, the payment of bonuses, gratuities, profit shares, premiums or other extra payments is wholly discretionary. Even repeated payments without the reservation of their voluntary nature will not create any legal claim for the Employee, either in respect to their cause or their amount, or for the past or for the future.

Should the Employee have received any payment in excess of the Employee's actual entitlement, the Employee will, upon the Company's first request, pay back the excess amount to the Company within 30 days of the request. Payments that the Company, without being in any error, declares as voluntary are not covered by this repayment obligation.

6.2 Hiring Incentive
The Company will pay the Employee a one-time only hiring incentive of **CHF 20,000**, subject to statutory deductions, during the month following the end of the probation period set forth in clause 2.2, provided that the Employee is still employed by the Company on the date of the payment and neither party has given notice before the date of the payment to terminate this Agreement.

6.3 Social Security

The Employee will participate in the Company's pension fund under such fund's regulations as in force from time to time.

Article 7

Sickness / Insurance

7.1 Sickness

If the Employee is prevented from working due to sickness or accident, the Employee will inform the Company without delay. The Employee will submit a medical certificate as from the third day of absence. The Company may, however, ask for a medical certificate even for shorter absences. If the Employee is prevented from working for a longer period of time than stated in the medical certificate, the Employee will inform the Company upon the expiry of the first certificate and submit another medical certificate within three days.

7.2 Second Medical Opinion

The Company is entitled to demand a physical exam by a medical referee. The Employee will release the medical referee and the Employee's own doctor from the doctor's secrecy to the extent such a release is required to assess the Employee's rights and obligations in connection with the employment.

7.3 Salary Continuance

If the Employee is by no fault of her own and for reasons inherent in the Employee's personality, such as sickness or accident, prevented from performing work, the Employee's statutory claims are replaced by a claim against the Company for salary continuance during a 30-day period. After the expiration of this 30-day period, the Employee will, in case of sickness or accident, be covered by the accident insurance or the sick pay insurance procured by the Company.

The Company is responsible for the payment of sick-pay and accident insurance premiums.

Article 8

Vacation

8.1 The Employee is entitled to **28 days** of paid vacation per calendar year in addition to the public holidays in the Canton of Geneva.

The dates of the vacation are subject to the prior approval of the Company, which will take into consideration the wishes of the Employee, provided that those are consistent with the Company's interests.

Article 9

Data Privacy

9.1 Acknowledgment and Consent to Process and Access Employee's Personal Information

In the course of its performance of this Agreement, the Company will collect and process the Employee's personal information and monitor his or her use of Company information-technology systems as described in the privacy notices provided to Employee at the time of hire.
The Employee has carefully read and taken notice of the information contained in the privacy notices concerning Company processing and transfer to the United States of the Employee's personal information.

On the basis of this information, the Employee agrees to the processing of his or her data by the Company as well as to the transfer of his or her personal information outside of Switzerland and the European Union.

Article 10
Confidentiality Obligation

10.1 Non-Disclosure

The Employee will not, during the term of the Employee's employment, or at any time thereafter, disclose to anyone or use (except to the extent reasonably to perform the Employee's duties or comply with applicable law or regulations) any confidential materials, documents, records or other confidential information concerning the business or affairs of the Company, or of its affiliates and subsidiaries, which the Employee may have acquired in the course of the Employee's employment or prior dealings with the Company, or its affiliates and subsidiaries, including, without limitation, (i) lists of customers or clients as well as business data of the Company, and its affiliates and subsidiaries; and (ii) methods of doing business and products that are proprietary to the Company, or its affiliates and subsidiaries, provided these restrictions will not apply to materials, documents, records or other information that have entered the public domain other than as a result of a breach of fiduciary duty or contractual obligation of any employee of the Company, or of its affiliates or subsidiaries.

10.2 Return of Company Property

At the termination of this Agreement, the Employee will return to the Company all documents (physical and electronic) in the Employee's possession that belong to the Company or to any of its affiliates or subsidiaries. The Employee will also give the Company access to all of the Employee's notes, client lists, and other documents of any nature and regardless of their physical medium to the extent these materials concern the activities of the Company or of any of its affiliates or subsidiaries. Any retention right is excluded.

Article 11
Intellectual Property

11.1 All intellectual property rights including but not limited to patent rights, design rights, copyrights and related rights, database rights, trademark rights and chip rights as well as any rights in know-how arising from any work performed by the Employee during the term of the Employee's employment (hereinafter the "Intellectual Property Rights"), will vest exclusively in the Company. The Employee may not, without the Company's written consent, disclose, multiply, use, manufacture, bring on the market or sell, lease, deliver or otherwise trade, offer, or register the results of his or her work.

11.2 Insofar as Intellectual Property Rights are not vested in the Company by operation of law or based on article 11.1 above, the Employee will transfer and, insofar as possible, hereby transfers to the Company such rights. The Company may, however, waive this transfer or transfer back to the Employee any such Intellectual Property Rights at any time by providing the Employee an express writing citing this article. If a transfer is not possible under applicable law, then the Employee will grant to the Company a worldwide, perpetual, transferable, sub-licensable, royalty-free license to use and exploit such Intellectual Property Rights in any way the Company deems fit.

11.3 The Employee acknowledges that the Employee's salary includes reasonable compensation for the loss of Intellectual Property Rights.

11.4 The Company is entitled to transfer the Intellectual Property Rights in full or in part to any third party. The Company and such third parties are not obligated to mention the Employee as the author if they
publish any inventions, computer programs or other works. They are free to make any modifications, translations, or other adaptations and may refrain from making any publications.

Article 12
Prohibition to Compete or Disparage

12.1 Non-Competition

The Employee acknowledges that he will be aware of business secrets of the Company and shall not

• work for,
• consult for,
• take a direct financial interest in,
• establish, or
• promote the products of

any other business offering products or services directly competitive with the Company's business, given the state of technology and medical practice at the relevant time.

This prohibition is valid in countries of Switzerland, France, Germany, the Netherlands, Belgium, Luxembourg, the United Kingdom, and Italy during the effective period of this Agreement and for one year after its termination by the Employee. However, if the Company concludes in good faith that the Employee's position with a future employer does not pose a competitive threat to the Company's business, the Company agrees to waive its rights under this Article 12.

12.2 Consequences of Breach

The Company may seek immediate cessation of a breach of the prohibition set forth in article 12.1 pursuant to Article 340b, paragraph 3, of the Swiss Code of Obligations. In any event, the Company will be entitled to a penalty in an amount equal to the Employee's last annual base salary for every violation of the Employee's obligations under article 12.1. Payment of the penalty will not release the Employee from complying with the Employee's contractual obligations and the Company will have the right to claim compensation of any damages that exceed the penalty.

12.3 Non-Disparagement

The Employee will not make any statements that disparage the Company, its affiliates or subsidiaries or any of its respective employees, officers, directors, products or services. Notwithstanding the foregoing, statements made under oath in administrative, judicial or arbitral proceedings are not subject to this article.

Article 13
Compliance with Applicable Laws

13.1 Compliance with Laws

The Employee will comply with all applicable laws, regulations, and governmental orders of the Swiss Confederation or of the Republic and Canton of Geneva, now or hereafter in effect, relating to the Employee's employment by the Company.

13.2 Code of Conduct
The Employee confirms that he or she has read and understood the provisions of the Genomic Health Global Code of Conduct.

The Employee acknowledges that the Code of Conduct and other policies of the Company or of Genomic Health, Inc., as amended or supplemented from time to time in the Company's sole discretion, form part of the Company's mandatory directives, and the Employee will adhere to them in the performance of this Agreement.

13.3 No Corruption

The Employee agrees to comply with all applicable treaties, laws, regulations, and governmental orders of the Swiss Confederation and the United States of America, now or hereafter in effect, relating to the Employee's employment by the Company, including but not limited to local bribery laws and the United States Foreign Corrupt Practices Act.

Without limiting the generality of the foregoing, the Employee represents and warrants that the Employee has not, and will not at any time during the Employee's employment with the Company, pay, give, or offer or promise to pay or give, any money or any other thing of value, directly or indirectly, to, or for the benefit of: (i) any government official, political party or candidate for political office; or (ii) any other person, firm, corporation or other entity, with knowledge that some or all of that money or other thing of value will be paid, given, offered or promised to a government official, political party or candidate for political office, for the purpose of obtaining or retaining any business, or to obtain any other unfair advantage, in connection with the Company's business.

13.4 Export Control

The Employee acknowledges that the Company's products, and all technical data pertaining to those products, are potentially subject to export controls under the laws and regulations of the United States, including the U.S. Export Administration Regulations, 15 C.F.R. Parts 730-774, and possibly of other countries. During the Employee's employment with the Company, the Employee will comply strictly with all such export controls, and, without limiting the generality of this article, the Employee will not export, re-export, transfer or divert any of the Company's products and technical data pertaining to such products, or any direct product thereof to any destination, end-use or end-user that is prohibited or restricted under United States export control laws and regulations, except as specifically authorized by the United States Department of Commerce. The Employee's obligations under this article will survive the expiration or termination of this Agreement.

Article 14
Declarations

14.1 As of the signature date of this Agreement, the Employee declares and warrants that:

- the execution of this Agreement, and the performance of Employee's duties hereunder, does not and will not interfere with, violate or breach any agreement, contract or other rights of any person, legal or physical; and

- the Employee has no knowledge of any regulatory investigation, audit investigation, litigation or legal inquiry or subpoena, whether threatened or pending, that in any way involves the Employee.

Article 15
Miscellaneous

15.1 Contingencies
This Agreement is contingent upon:

• the Employee's authorization to work for the Company in Switzerland; and
• the absence of any contractual obligation of the Employee not to enter an agreement of this nature.

15.2 Language

The Parties attest to their command of the English language and their perfect comprehension of this Agreement as drafted in the English language.

15.3 Entire Agreement

This Agreement is the sole expression of the parties' agreement as to its subject matter and supersedes all prior discussions, understandings, or agreements, whether written, oral or tacit.

15.4 No Modification

This Agreement, including this provision, cannot be terminated, modified, amended or waived in any way, in whole or in part, except by an instrument in writing duly signed by both parties.

15.5 Severability

Should one or more provisions of this Agreement not be enforceable, this does not affect the validity of the other provisions of this Agreement and the unenforceable provision will be replaced by such enforceable provision that best reflects the parties' intent when agreeing on the unenforceable provision.

Article 16
Governing Law - Jurisdiction

16.1 Applicable Laws

This Agreement is governed by and to be construed in accordance with the laws of the Swiss Confederation and of the Republic and Canton of Geneva.

16.2 Disputes

Any disputes arising out of or in connection with this Agreement will be submitted, at the plaintiff's choice, to the courts having competence in the Canton of Geneva.

EMPLOYEE

/s/ Torsten Hoof
Torsten Hoof / Date

Executed in two copies, in Menzingen, Switzerland, on August 12, 2012

Genomic Health International Sàrl
11 September 2017

Mr. Torsten Hoof
Luegtenstrasse 26
6313 Menzingen (Zug)

Re: Amendment to Employment Agreement commencing 1 September 2017

Dear Torsten:

As a correction to your Employment Agreement, we confirm that you will receive a monthly car benefit payment of 1'650 CHF, subject to statutory deductions, along with your monthly salary.

The Geneva Fiscal Administration's interpretation of Geneva tax law unfortunately prevents the Company from paying kilometrage on your personal car when you use it for business purposes if you benefit from a car allowance, but there is otherwise no effect on the Company's reimbursement of your expenses.

This benefit will be considered incorporated into your Employment Agreement unless you object.

If you have any questions, please let me know.

Sincerely,

/s/ Jennifer May

Jennifer May
Senior Director, Human Resources

By express power of attorney
SECOND AMENDMENT TO EMPLOYMENT AGREEMENT

THIS SECOND AMENDMENT TO EMPLOYMENT AGREEMENT (this "Amendment"), is made and entered into this 13th day of November, 2019 (the "Effective Date"), by and between Genomic Health International Sari ("Company") and Torsten Hoof ("Employee") (collectively, the "Parties").

WHEREAS, Employee and Company are parties to an Employment Agreement with an effective date of 1 September, 2017, as amended effective 11 September, 2017 (the "Employment Agreement"); and

WHEREAS, pursuant to the terms of that certain Agreement and Plan of Merger between Genomic Health, Inc. ("GHI") and Exact Sciences Corporation ("Exact"), dated July 28, 2019 (the "Merger Agreement"), Exact will acquire GHI as a wholly owned subsidiary of Exact; and

WHEREAS, the Parties wish to amend the Employment Agreement as set forth herein in connection with the merger of GHI and Exact.

NOW THEREFORE, in consideration of the foregoing recitals and intending to be legally bound hereby, Company and Employee agree as follows:

1. Section 1.1 of the Employment Agreement shall be amended and restated in its entirety, as follows:

1.1 Title

The Company will employ the Employee as General Manager, International.

2. The second paragraph of Section 6.1 shall be amended and restated in its entirety as follows:

The Employee may be entitled to annual variable compensation of an indicative value of sixty percent (60%) of the Base Salary, subject to statutory deduction, if any, if and only to the extent that the conditions fixed in the Genomic Health Corporate Bonus Plan (as amended from time to time in Genomic Health, Inc.’s sole discretion) are satisfied.

3. Article 6 of the Employment Agreement is amended by adding the following new Section 6.4 to the end thereof.

6.4 One-time Retention Equity Award

Pursuant to the terms and conditions of the Retention Equity Award Letter attached hereto as Exhibit A, including the return of an executed copy of such letter as described therein, Employee will be eligible to receive a one-time retention equity award in November, 2019.

4. Article 9 of the Employment Agreement is amended and replaced in its entirety as follows:

9.1 The Company will comply with the Swiss Data Protection Act, as amended ("DPA"). The Company will only collect personal data of the Employee insofar as necessary for the execution and performance of the Employment and the obligations resulting therefrom or if required to do so by law. Specifically, the Company reserves the right to:

9.1.1 obtain, keep, use and produce records containing information about the Employee for administrative, management, analysis and assessment purposes, in connection with recruitment, employment and remuneration both in the Employee's personnel file and on the Company's computer system. The Company will only use information held about the
Employee in ways that are consistent with the employment relationship, the operation of the Company's business, and the principles of the DPA;

9.1.2 obtain, keep, produce and use personal data relating to the Employee's necessary health information for the administration of the Company's sick pay scheme or other reasonable administrative purposes, and for complying with statutory obligations;

9.1.3 obtain, keep and use personal data relating to details of alleged offenses committed by the Employee where the details have a direct bearing on the employment relationship; and

9.1.4 disclose information about the Employee to third parties when necessary for the Employment, for the administration of this Agreement and its Exhibit, or when required pursuant to applicable law.

9.2 The Employee herewith agrees that personal data may be transferred to any of the Company's affiliated entities (including, but not limited to, parent companies or subsidiaries), and to further third parties (including, but not limited to companies processing data or providing necessary employment related services to the Company, its parents, subsidiaries, or affiliates) within and outside of Switzerland if such transfer is required in connection with the Employment, the execution of the Employment Agreement or its Exhibit, the performance of any obligations resulting from the Employment, the work organization of the Company or otherwise required by Swiss law or the laws of any other relevant jurisdiction. Where the disclosure or transfer is to a country outside of Switzerland or the European Economic Area ("EEA"), the Company will take steps to facilitate that the Employee's rights and freedoms in relation to the processing of the relevant personal data are adequately protected.

9.3 In signing this Amendment, the Employee consents to the Company carrying out the processing of personal data described in this Section.

5. The Employment Agreement is amended by adding the following new Article 17 to the end thereof.

**Article 17**

Changes to Employment - Waiver

**17.1 Waiver**

Employee acknowledges and agrees that, notwithstanding anything to the contrary in that certain Agreement and Plan of Merger between Genomic Health, Inc. and Exact Sciences Corporation ("Exact"), dated July 28, 2019 (the "Merger Agreement") and the Genomic Health, Inc. Severance Plan For Executive Management (International Version) (the "Severance Plan") or any other agreement between Employee and the Company, Genomic Health, Inc. or Exact (or any of their respective affiliates), (i) none of the changes in the terms and conditions of Employee's employment in connection with the transactions contemplated by the Merger Agreement shall constitute "Good Reason" for purposes of the Merger Agreement, the Severance Plan, or any other agreement between Employee and the Company, Genomic Health, Inc. or Exact (or any of their respective affiliates), (ii) the letter attached to this Agreement as Exhibit A sets forth all rights the Employee may have with respect to the Retention Equity Award upon a termination of Employee's employment with the Company, Genomic Health, Inc. or Exact (or any of their respective affiliates), and Employee shall not have any additional rights with respect to the Retention Equity Award upon any such termination of employment pursuant to the Merger Agreement, the Severance Plan or otherwise.

IN WITNESS WHEREOF, the Parties have executed this Second Amendment to the Employment Agreement as of the day and year first above written.
EMPLOYEE

/s/ Torsten Hoof
Torsten Hoof

GENOMIC HEALTH INTERNATIONAL SÀRL

By: /s/ D. Scott Coward

Name: D. Scott Coward

Title: Secretary
EXHIBIT A

RETENTION EQUITY AWARD LETTER
Dear Torsten,

We are thrilled that you are becoming part of our team and will share in our mission to relentlessly pursue smarter answers that give people clarity to take life-changing action, earlier.

I'm excited to share important information about a one-time, Retention Equity Award that Exact is offering you in the context of its merger with Genomic Health, Inc. ("GHI") pursuant to the terms of that certain Agreement and Plan of Merger between GHI and Exact, dated July 28, 2019 (the "Merger Agreement").

As special consideration for your continued commitment to our shared goals and in recognition of your tremendous expertise and leadership in your position in the new, combined organization, we would like to grant you a one-time, retention equity award in November, 2019 (the "Retention Equity Award").

Terms and Conditions of the Award

For the one-time, Retention Equity Award, you will receive a grant of restricted stock units (RSUs) with a $250,000 target value in November 2019. This award will be settled in a number of shares of Exact's common stock based on the 30-day trading average at the time of the grant and will vest in full on December 31, 2020 (unless your employment is terminated earlier by GHI or Exact (or any affiliate of GHI or Exact) without Cause, in which case the award will vest in full on the date of termination). You must remain employed by GHI or Exact (or any affiliate of GHI or Exact) at the time of the grant to be eligible for the award. You will see the annual stock award details, along with award agreements, in your Fidelity account when granted. The Retention Equity Award will not be granted if the closing of the merger of Exact Sciences and GHI does not occur prior to December 31, 2019.

Notwithstanding anything to the contrary in the Merger Agreement, the Genomic Health Severance Plan For Executive Management, as amended or the Genomic Health Severance Plan For Executive Management (International Version) (together, the "Severance Plans") or any other agreement between you and GHI or Exact (or any affiliate of GHI or Exact), upon a termination of employment for any reason prior to the vesting date, any then-unvested portion of the RSUs will be forfeited and immediately canceled upon such termination of employment unless otherwise provided in your award agreement.

Please return a signed copy of this letter to me within five (5) days of receiving this letter, indicating your agreement to the award outlined above and the terms and conditions set forth in this letter. By signing this letter:

• You acknowledge and agree that, notwithstanding anything to the contrary in the Merger Agreement, the Severance Plans or any other agreement between you and GHI or Exact (or any affiliate of GHI or Exact), (i) none of the changes in the terms and conditions of your employment in connection with the transactions contemplated by the Merger Agreement shall constitute "Good Reason" for purposes of the Merger Agreement, the Severance Plans, or any other agreement between you and GHI or Exact (or any affiliate of GHI or Exact) and (ii) this letter sets forth all rights you may have with respect to the Retention Equity Award upon a termination of your employment with GHI or Exact (or any affiliate of GHI or Exact), and you shall not have any additional rights with respect to the Retention Equity Award upon any such termination of employment pursuant to the Merger Agreement, the Severance Plans or otherwise.

• You do not waive any rights to severance under the Severance Plans if your employment is terminated (i) by Exact or the applicable employing subsidiary other than for Cause, as that term is defined in the
applicable Severance Plan; or (ii) by you for Good Reason, as that term is defined in the applicable Severance Plan, as long as the facts underlying your assertion of Good Reason occurred other than in connection with the transactions contemplated by the Merger Agreement.

- You waive any right to a 2020 grant of Exact restricted stock units that might otherwise exist under the Merger Agreement.
I look forward to supporting you in your success at Exact. Thank you for your commitment to our important mission.

Best regards,

/s/ Sarah Condella

Sarah Condella
SVP, Human Resources

Agreed to by:

/s/ Torsten Hoof

Torsten Hoof

Dated

1 Additional terms and conditions for the Retention Equity Award, including terms and conditions regarding time of settlement, end of employment, transfer restrictions and other customary provisions, will be set forth in an award agreement provided to you at the time of grant. Certain terms and conditions are described under the "Terms and Conditions of the Award" section below.
November 15, 2019

G. Brad Cole
301 Penobscot Dr, Redwood City, CA 94063

RE: RETENTION BONUSES AND RETENTION EQUITY AWARD

Dear Brad:

On behalf of Exact Sciences Corporation ("Exact," "we," or "us"), I am pleased to provide you with this letter agreement ("Agreement") setting forth the terms and conditions of a retention arrangement that Exact is offering you in the context of its merger with Genomic Health, Inc. ("GHI") pursuant to the terms of that certain Agreement and Plan of Merger between GHI and Exact, dated July 28, 2019 (the "Merger Agreement").

The Retention Bonuses, 2020 and 2021 annual bonuses, and the Retention Equity Award outlined in this letter are all subject to approval by Exact Sciences Corporation's Compensation and Management Development Committee.

Retention Bonuses

In recognition of your continued service through December 31, 2020 (the "First Retention Period"), you will be eligible to receive a retention bonus in the amount of five hundred and fifty thousand dollars ($550,000), less all applicable withholdings and deductions required by law (the "First Retention Bonus").

Further, in recognition of your continued service through and until May 8, 2021 (the "Second Retention Period," together with the First Retention Period, the "Retention Periods"), you will be eligible to receive an additional retention bonus in the amount of four hundred and fifty thousand dollars ($450,000), less all applicable withholdings and deductions required by law (the "Second Retention Bonus," together with the First Retention Bonus, the "Retention Bonuses").

You will be eligible to receive the Retention Bonuses if all of the following eligibility criteria are satisfied:

1. (a) For purposes of the First Retention Bonus: You are actively employed in good standing by GHI or Exact (or any affiliate of GHI or Exact), as applicable, from the date of this Agreement through the last day of the First Retention Period; provided, however, that you will be eligible to receive the full First Retention Bonus if (i) GHI or Exact (or any affiliate of GHI or Exact), as applicable, gives you notice of termination of your employment other than for Cause (as defined below) on or before the last day of the First Retention Period and (ii) you satisfy all of the other eligibility criteria set forth in this Agreement (including the requirement that you remain actively employed in good standing through the date of termination of employment).

   (b) For purposes of the Second Retention Bonus: You are actively employed in good standing by GHI or Exact (or any affiliate of GHI or Exact), as applicable, from the date of this Agreement through the last day of the Second Retention Period; provided, however, that you will be eligible to receive the full Second Retention Bonus if (i) GHI or Exact (or any affiliate of GHI or Exact), as applicable, gives you notice of termination of your employment other than for Cause (as defined below) on or before the last day of the Second Retention Period and (ii) you satisfy all of the other eligibility criteria set forth in this Agreement (including the requirement that you remain actively employed in good standing through the date of termination of employment).

For purposes of this Agreement, "Cause" means Exact's good faith determination that you have engaged in any of the following: (i) willful and deliberate failure to perform your responsibilities as an employee of GHI or Exact or any of their affiliates, including but not limited to misappropriation, embezzlement,
intentional fraud or other violation of the law or similar conduct by you involving Gill or Exact or any of their affiliates; (ii) any damage to any property of GHI and/or Exact or any of their affiliate caused by your willful or grossly negligent conduct; (iii) the failure to comply with the reasonable instructions of the officers of GM or Exact or otherwise to execute the requirements of your present position after reasonable notice and opportunity to cure; or (iv) conduct by you that in the good faith determination of Exact constitutes harassment of any employee or violation of any law, regulation or published policy applicable to the business of Exact.

2. You sign and return this Agreement to Sarah Condella within five business days of receiving this Agreement.

3. You sign and return a general release of claims in favor of us and our affiliates in the form we provide to you, which shall be in substantially the form attached hereto as Exhibit A, within the consideration period set forth in the general release of claims, and you do not revoke the release before it becomes fully effective.

If you meet all of the eligibility criteria described above, the Retention Bonuses will be paid to you in one lump sum cash payment within sixty (60) days following the end of the applicable Retention Period (or if you are given notice of termination of your employment other than for Cause on or before the last day of the applicable Retention Period, within sixty (60) days following your termination date), subject to your delivery of a signed copy of the general release of claims and the expiration of any applicable revocation period.

2020 and 2021 Annual Bonuses

If your employment terminates on or after January 1, 2020 and prior to December 31, 2020 for any reason other than for Cause, you will receive a pro-rata portion of the 2020 annual bonus that would be otherwise payable to you had you remained employed through December 31, 2020. If you remain employed through December 31, 2020 you will receive a full 2020 annual bonus. If your employment terminates on or after January 1, 2021 and prior to May 8, 2021 for any reason other than for Cause, you will receive a pro-rata portion of the 2021 annual bonus that would be otherwise payable to you had you remained employed through December 31, 2021.

The amount of the pro-rata annual bonus for 2020 or 2021, as applicable, will be the amount of the bonus to which you would otherwise be entitled for such year multiplied by a fraction the numerator of which is the number of days you were employed during 2020 or 2021, as applicable, and the denominator of which is 366 (in the case of the 2020 annual bonus) or 365 (in the case of the 2021 annual bonus).

Retention Equity Award

As additional consideration for your continued commitment to our shared goals and in recognition of your tremendous expertise and leadership in your position in the new, combined organization, we would like to grant you a one-time, retention equity award in 2019 (the "Retention Equity Award"). You will receive a grant of restricted stock units ("RSUs") with a $800,000 target value on or before December 31, 2019.

This award will be settled in a number of shares of the Company's common stock based on the 30-day trading average at the time of the grant and will vest in full on December 31, 2020 (unless your employment is terminated earlier by GHI or Exact (or any affiliate of GHI or Exact) without Cause, in which case the award will vest in full on the date of termination). You must remain employed by GHI or Exact (or any affiliate of GHI or Exact) at the time of the grant to be eligible for the award. You will see the annual stock award details, along with award agreements, in your Fidelity account when granted.

Notwithstanding anything to the contrary in the Merger Agreement, the Genomic Health Severance Plan For Executive Management, as amended or the Genomic Health Severance Plan For Executive Management (International Version) (together, the "Severance Plans") or any other agreement between you and GHI or Exact Sciences (or any affiliate of GHI or Exact Sciences), upon a termination of employment for any reason prior to the
vesting date, any then-unvested portion of the RSUs will be forfeited and immediately canceled upon such termination of employment unless otherwise provided in your award agreement.

**Additional Terms and Conditions**

This Agreement does not constitute an employment contract guaranteeing employment for any set period of time.

By signing this Agreement:

- You acknowledge and agree that, notwithstanding anything to the contrary in the Merger Agreement, the Severance Plans or any other agreement between you and GHI or Exact (or any affiliate of GHI or Exact), (i) none of the changes in the terms and conditions of your employment in connection with the transactions contemplated by the Merger Agreement shall constitute "Good Reason" for purposes of the Merger Agreement, the Severance Plans, or any other agreement between you and GHI or Exact (or any affiliate of GHI or Exact) and (ii) this Agreement sets forth all rights you may have with respect to the Retention Bonuses and the Retention Equity Award upon a termination of your employment with GHI or Exact (or any affiliate of GHI or Exact), and you shall not have any additional rights with respect to the Retention Bonuses or the Retention Equity Award upon any such termination of employment pursuant to the Merger Agreement, the Severance Plans or otherwise.

- You do not waive any rights to severance under the Severance Plans if your employment is terminated (i) by Exact Sciences or the applicable employing subsidiary other than for Cause, as that term is defined in the applicable Severance Plan; or (ii) by you for Good Reason, as that term is defined in the applicable Severance Plan, as long as the facts underlying your assertion of Good Reason occurred other than in connection with the transactions contemplated by the Merger Agreement.

- You waive any right to a 2020 grant of Exact Sciences restricted stock units that might otherwise exist under the Merger Agreement.

This Agreement contains all of the understandings and representations between you and us relating to the Retention Bonuses and supersedes all prior and contemporaneous understandings, discussions, agreements, representations, and warranties with respect to any retention bonus.

This Agreement is governed by the laws of the state of California without giving effect to its conflicts of laws principles.

We look forward to the opportunity of continuing to work with you and sincerely hope these terms are agreeable to you. Please signify your acceptance of this Agreement by signing this Agreement and returning the signed copy to me by November 20, 2019.

[Signature page follows]

1 Additional terms and conditions for the Retention Equity Award, including terms and conditions regarding time of settlement, end of employment, transfer restrictions and other customary provisions, will be set forth in an award agreement provided to you at the time of grant. Certain terms and conditions are described in this Agreement
Very truly yours,
EXACT SCIENCES CORPORATION

By: /s/ Sarah Condella
Name: Sarah Condella
Title: Senior Vice President, Human Resources

Agreed to and accepted by:
/s/ G. Brad Cole
G. Brad Cole
Date: November 15, 2019

Agreed to and accepted by:
/s/ D. Scott Coward
D. Scott Coward
Title: Senior Vice President, General Counsel and Secretary
This EMPLOYMENT AGREEMENT ("Agreement") is entered into effective as of February 18, 2019 (the “Effective Date”), by and between Jacob Orville ("Employee") and Exact Sciences Corporation, a Delaware corporation (the "Company," and together with Employee, the "Parties").

WHEREAS, the Company desires to employ Employee as its Senior Vice President, Pipeline, and Employee desires to accept such employment, under this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and conditions hereinafter set forth, and other good and valuable consideration, receipt of which is hereby acknowledged, the Parties agree as follows:

1. Employment. The Company shall employ Employee as the Company’s Senior Vice President, Pipeline and Employee shall serve the Company in such position, under this Agreement and subject to the authority and direction of the Board of Directors of the Company (the “Board”) or its designee. Employee shall (a) devote his or her full-time professional efforts, attention and energies to the business of the Company, (b) owe an undivided duty of loyalty to the Company and (c) faithfully and to the best of Employee’s abilities perform his or her duties hereunder. Employee may serve as a director or committee member of other corporations, charitable organizations and trade associations (provided that the Company is notified in advance of all such positions) and may otherwise engage in charitable and community activities, deliver lectures and fulfill speaking engagements (with the prior approval of the CEO), and manage personal investments, but only if such services and activities do not interfere with the performance of Employee’s duties and responsibilities under this Agreement.

2. Term of Employment. Employee’s employment (the “Employment Term”) shall continue until terminated as provided in Section 6 below. A "Separation from Service" means the termination of Employee’s employment with, and performance of services for, the Company and each Affiliate. If Employee is employed by, or performing services for, an Affiliate or a division of the Company or an Affiliate, Employee shall not be deemed to incur a Separation from Service if such Affiliate or division ceases to be an Affiliate or division of the Company, as the case may be, and Employee immediately thereafter becomes an employee of (or service provider to) the Company or an Affiliate or a successor company or an affiliate or subsidiary thereof. Approved temporary absences from employment because of illness, vacation or leave of absence and transfers among the Company and its Affiliates will not be considered a Separation from Service. Notwithstanding the foregoing, with respect to any amount or benefit under this Agreement that constitutes nonqualified deferred compensation under Section 409A of the Internal Revenue Code of 1986, as amended (the “Code”), and that is payable upon a Separation from Service, “Separation from Service” means a “separation from service” as defined under Code Section 409A.

3. Compensation. During the Employment Term, Employee shall receive the following compensation from the Company.

   a. Base Salary. Employee’s annual base salary on Effective Date is Three Hundred Seventy-Five Thousand dollars and eight cents ($375,000.08), payable in accordance with the normal payroll practices of the Company ("Base Salary"). Employee’s Base Salary shall be subject to annual review by the Company’s Chief Executive Officer (the “CEO”), the Board and its Compensation Committee (the “Committee”). During the Employment Term, the Company shall periodically, in the discretion of, and at intervals determined by, the Committee, review the Base Salary amount to determine any modifications. In no event shall the Base Salary, following any such modification, be less than the Base Salary amount for the immediately preceding twelve (12)-month period other than as permitted in Section 6.a(iii) below.

   b. Annual Bonus Compensation. Employee shall be eligible to be considered for an annual, discretionary cash bonus each calendar year. Employee’s target annual bonus percentage for each calendar year shall be fifty percent (50%) of his or her Base Salary as of January 1 of the
applicable new calendar year. Employee acknowledges that any such annual bonus shall be entirely within the discretion of the CEO and the Committee based upon the achievement of goals (including corporate and individual goals) and other discretionary factors as determined by the Board or the Committee after consultation with the CEO. Except as otherwise provided in the discretion of the Committee or in this Agreement, Employee shall not be eligible to be considered for, or to receive, an annual bonus for any calendar year unless he or she remains employed with the Company through December 31 of the applicable calendar year and through the date of payment of such bonus. If an annual bonus is awarded to Employee, it shall be paid no later than March 15 following the end of the calendar year for which it was awarded.

c. Equity Incentives.

i. The Board, upon the recommendation of the Committee, or the Committee, may grant Employee from time to time options to purchase shares of the Company’s common stock and other equity compensation plan awards, including restricted stock units, both as a reward for past individual and corporate performance and as an incentive for future performance. Such options and other awards, if granted, shall be pursuant to the Company’s then current equity compensation plan. For purposes of this Agreement, “Equity Awards” means Employee’s stock options, stock appreciation rights, restricted stock units (including performance stock units) and restricted shares (including performance shares), in each case that are issued and outstanding under a Company equity compensation plan; and, for the avoidance of doubt, Equity Awards shall not include any rights or benefits under the Company’s 2010 Employee Stock Purchase Plan, as amended, or any successor plan thereto. For purposes of this Agreement, a “Performance Award” means an Equity Award that vests or becomes earned subject to the attainment of performance goals.

ii. Effective DATE, Employee will receive an initial grant of restricted stock units (“RSUs”) with a value of one million, two hundred thousand dollars ($1,200,000.00) to be settled in shares of the Company’s common stock based on the 30-day trading average at the time of grant, pursuant to the Company’s stock option plan upon commencement of employment. Twenty-five percent (25%) of the shares underlying the RSUs shall vest on the first anniversary of the date of grant and annually thereafter, commencing on the first anniversary of the grant date, subject to the acceleration of vesting (i) as described in Section 6.a hereof, (ii) as described in Section 7.a(iv) and 7.b(ii) hereof, and (iii) as may be set forth in the grant agreements issued by the Company, as amended, provided, that in the event of a conflict between any grant agreement and this Agreement this Agreement shall control.

d. Relocation bonus. The Company shall pay Employee a one-time relocation payment of three hundred and twenty-five thousand dollars ($325,000) to assist with Employee’s moving and relocation expenses associated with relocation to Madison, Wisconsin (“Relocation Bonus”). This one-time Relocation Bonus will be paid within thirty (30) days from Effective Date. The Company will also pay the reasonable expenses incurred in moving Employee’s household goods (to include vehicles) to permanent or temporary housing in Madison, Wisconsin (“Reasonable Moving Expenses”). The Reasonable Moving Expenses payment will be arranged directly between a third-party moving partner and Company. Should Employee voluntarily terminate employment within eighteen (18) months of Effective Date, Employee must repay to Company the full Relocation Bonus and Reasonable Moving Expenses within thirty (30) days of the last date of Employee’s employment with Company.

e. Sign-on bonus. The Company shall pay Employee a one-time sign-on bonus of two hundred thousand dollars ($200,000.00) (“Sign-on Bonus”), which is intended to provide compensation for a bonus payment anticipated in 2019 from Employee’s previous employer if Employee had continued his employment with that employer. This one-time Sign-on Bonus will be paid within thirty (30) days from Effective Date. Should employee voluntarily terminate employment within
eighteen (18) months of Effective Date, Employee must repay to the Company the full Sign-on Bonus within thirty (30) days of the last date of Employee’s employment with Company.

   a. Benefits. Employee shall be entitled to participate in the sick leave, insurance (including medical, life and long-term disability), profit-sharing, retirement and other benefit programs that are generally provided to similarly situated and performing employees of the Company, all in accordance with the rules and policies of the Company as to such matters and the plans established therefore.
   b. PTO and Paid Holidays. Employee shall receive paid time off (“PTO”) and Paid Holidays (including dates designated as Company-wide holidays and floating personal holidays) as provided by and subject to the terms of the Company’s applicable policies. These policies presently provide fulltime employees with four (4) weeks of PTO and twelve (12) Paid Holidays per calendar year (pro-rated based on start-date).
   c. Indemnification. To the fullest extent permitted by applicable law or the Company’s articles of incorporation and bylaws, the Company shall, during the Employment Term and after Employee’s Separation from Service, indemnify Employee (including providing advancement of expenses) for any judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys’ fees, incurred by Employee in connection with the defense of any lawsuit or other claim or investigation to which Employee is made, or threatened to be made, a party or witness by reason of being or having been an officer, director or employee of the Company or any of its subsidiaries or affiliates as deemed under the Securities Exchange Act of 1934, as amended (“Affiliates”), or a fiduciary of any of their benefit plans, other than actions by the Company against Employee alleging breach of this Agreement by Employee.
   d. Liability Insurance. Both during the Employment Term and after Employee’s Separation from Service, the Company shall cause Employee to be covered under a directors and officers’ liability insurance policy for his or her acts (or non-acts) as an officer of the Company or any of its Affiliates. Such policy shall be maintained by the Company, at its expense in an amount and on terms (including the time period of coverage after Employee’s Separation from Service) at least as favorable to Employee as policies covering the Company’s other executive officers.

5. Business Expenses. Upon submission of a satisfactory accounting by Employee, consistent with the policies of the Company, the Company shall reimburse Employee for any reasonable and necessary out-of-pocket expenses actually incurred by Employee in the furtherance of the business of the Company.

   a. By Employee.
      i. Without Good Reason. Employee may initiate Employee’s Separation from Service under this Agreement at any time without Good Reason with at least thirty (30) business days’ written notice (the “Employee Notice Period”) to the Company. Upon Separation from Service by Employee under this section, the Company may, in its sole discretion and at any time during the Employee Notice Period, suspend Employee’s duties for the remainder of the Employee Notice Period, as long as the Company continues to pay compensation to Employee, including benefits, throughout the Employee Notice Period.
      ii. With Good Reason. Subject to Section 7.a below, Employee may initiate Employee’s Separation from Service under this Agreement with Good Reason at any time within ninety (90) days after the occurrence of an event constituting Good Reason.
Good Reason Defined. “Good Reason” means, provided that Employee has complied with the Good Reason Process following the occurrence of any of the following events without Employee’s consent: (i) Employee’s Base Salary is reduced (x) in a manner that is not applied proportionately to other senior executive officers of the Company or (y) by more than thirty percent (30%) of Employee’s then current Base Salary; (ii) Employee’s duties, authority or responsibilities are materially reduced or are materially inconsistent with the scope of authority, duties and responsibilities of Employee’s position; (iii) the occurrence of a material breach by the Company of any of its obligations to Employee under this Agreement; or (iv) a relocation of Employee’s principal place of employment by more than fifty (50) miles.

Good Reason Process. “Good Reason Process” means that (i) Employee reasonably determines in good faith that a Good Reason condition has occurred; (ii) Employee notifies the Company in writing of the occurrence of the Good Reason condition within sixty (60) days of such occurrence; (iii) Employee cooperates in good faith with the Company’s efforts, for a period of not less than thirty (30) days following such notice (the “Cure Period”), to remedy the condition; (iv) notwithstanding such efforts, the Good Reason condition continues to exist following the Cure Period; and (v) Employee Separates from Service for Good Reason within sixty (60) days after the end of the Cure Period. If the Company cures the Good Reason condition during the Cure Period, and Employee Separates from Service due to such condition (notwithstanding its cure), then Employee shall not be deemed to have Separated from Service for Good Reason.

By the Company.

With Cause. The Company may initiate Employee’s Separation from Service under this Agreement for Cause immediately upon written notice to Employee.

Cause Defined. “Cause” means any of the following:

1. Employee’s willful failure or refusal to perform Employee’s duties that continues for more than three (3) days after written notice from the Company;
2. Employee’s willful failure or refusal to follow or comply with any Company policy, rule or procedure that continues for more than three (3) days after written notice from the Company;
3. Employee’s commission of any fraud or embezzlement in connection with Employee’s duties or committed in the course of Employee’s employment;
4. Employee’s gross negligence or willful misconduct with regard to the Company or any of its Affiliates resulting in a material economic loss to the Company;
5. Employee’s conviction of, or plea of guilty or nolo contendere to, a felony or other crime involving moral turpitude;
6. Employee’s conviction of, or plea of guilty or nolo contendere to, a misdemeanor the circumstances of which involve fraud, dishonesty or moral turpitude and that is substantially related to the circumstances of Employee’s job with the Company;
7. Employee’s willful and material violation of any statutory or common law duty of loyalty to the Company or any of its Affiliates;
8. Employee’s material breach of this Agreement, the Non-Disclosure and Invention Agreement or the Restrictive Covenant Agreement; or
9. Employee’s material breach of the Company’s policies prohibiting harassment, discrimination, and/or retaliation, the Company’s Code of Business Conduct and Ethics, and/or the Company’s Insider Trading Policy.

A Separation from Service for Cause shall be deemed to include a determination by the Company in its sole discretion following Employee’s Separation from Service that circumstances existing prior to the Separation from Service or during the payment of severance benefits would have entitled the Company or an Affiliate to have terminated Employee’s service for Cause. All rights Employee has or may have under this Agreement shall be suspended automatically during the pendency of any investigation by the Company, or during any negotiations between the Parties, regarding any actual or alleged act or omission by Employee of the type described in the applicable definition of Cause.

i. Without Cause. Subject to Section 7.a below, the Company may initiate Employee’s Separation from Service under this Agreement without Cause upon at least thirty (30) days’ written notice (the “Company Notice Period”) to Employee. Upon any Separation from Service initiated by the Company without Cause, the Company may, in its sole discretion and at any time during the Company Notice Period, suspend Employee’s duties for the remainder of the Company Notice Period, as long as the Company continues to pay compensation to Employee, including benefits, throughout the Company Notice Period.

c. Death or Disability. Notwithstanding Section 2 above, in the event of the death of Employee or disability of Employee that prevents Employee from performing the Essential Job Functions of his or her position (even with a Reasonable Accommodation) during the Employment Term, (i) Employee shall incur a Separation from Service and this Agreement shall immediately and automatically terminate, (ii) the Company shall pay Employee (or in the case of death, Employee’s designated beneficiary) Base Salary and accrued but unpaid bonuses, in each case up to the date of Separation from Service and (iii) one hundred percent (100%) of Employee’s Equity Awards shall become fully vested and exercisable; and Employee shall be entitled to exercise such Equity Awards (if exercisable) in accordance with Section 7.f below. None of Employee, his or her beneficiary or his or her estate shall be entitled to any severance benefits set forth in Section 7 below if Employee’s Separation from Service occurs as a result of Employee’s death or disability. In the event of the disability of Employee, the Parties shall comply with applicable federal, state and local law. For purposes of this Section 6.c, “Essential Job Functions” and “Reasonable Accommodation” shall have the meanings of these terms under applicable law, and shall be interpreted to grant Employee the same, and no greater, rights and responsibilities provided by applicable law.

d. Survival. Each of the Non-Disclosure and Invention Agreement and the Restrictive Covenant Agreement described in Section 8 below and attached hereto as Exhibit A and Exhibit B, respectively, shall survive the termination of this Agreement.

7. Severance and Other Rights Relating to Separation from Service and Change in Control.

a. Separation from Service by the Company without Cause or by Employee for Good Reason. If the Company initiates Employee’s Separation from Service without Cause or if Employee initiates Employee’s Separation from Service for Good Reason, then subject to the conditions described in Section 7.e below, the Company shall provide Employee the following payments and other benefits:

i. (i) Salary continuation for a period of twelve (12) months at Employee’s then current Base Salary, which shall commence on the first payroll date that is on or that immediately follows the sixtieth (60th) day following the Separation from Service; (ii) any accrued but unpaid Base Salary as of the Separation from Service; and (iii) any earned, awarded and
ii. If Employee elects COBRA coverage for health and/or dental insurance in a timely manner, the Company shall pay the monthly premium payments for such timely elected coverage (consistent with what was in place at the Separation from Service) when each premium is due until the earliest of the following: (i) twelve (12) months from the Separation from Service; (ii) the date Employee obtains new employment that offers health and/or dental insurance that is reasonably comparable to that offered by the Company; or (iii) the date COBRA continuation coverage would otherwise terminate in accordance with the provisions of COBRA. Thereafter, health and dental insurance coverage shall be continued only to the extent required by COBRA and only to the extent Employee timely pays the premium payments himself or herself.

iii. Within thirty (30) days of the Separation from Service, the Company shall pay Employee Ten Thousand Dollars ($10,000) towards the cost of an outplacement consulting package for Employee.

iv. The time vesting and exercisability of one hundred percent (100%) of Employee’s Equity Awards shall accelerate by a period of twelve (12) months; and Employee shall be entitled to exercise such Equity Awards (if exercisable) in accordance with Section 7.6 below. For purposes of Performance Awards, Employee shall be treated under this Section 7.a(iv) as having remained in service for an additional twelve (12) months following actual Separation from Service, provided that Performance Awards shall not become vested or earned solely as a result of this Section 7.a(iv), and such vesting and earning shall remain subject to the attainment of all applicable performance goals, and such Performance Awards, if and to the extent they become vested or earned, shall be payable at the same time as under the applicable award agreement.

b. Change in Control. The Board has determined that it is in the best interests of the Company and its stockholders to ensure that the Company will have the continued dedication of Employee, notwithstanding the possibility, threat or occurrence of a Change in Control. The Board believes it is imperative to diminish the inevitable distraction of Employee by virtue of the personal uncertainties and risks created by a pending or threatened Change in Control, to encourage Employee’s full attention and dedication to the Company currently and in the event of any threatened or pending Change in Control and to provide Employee with compensation and benefits arrangements upon a Change in Control that ensure that the compensation and benefits expectations of Employee will be satisfied and that are competitive with those of other similarly-situated companies. Therefore, in order to accomplish these objectives, the Board has caused the Company to include the provisions set forth in this Section 7.b.

i. Change in Control Defined. “Change in Control” means, and shall be deemed to have occurred if, on or after the Effective Date, (i) any “person” (as such term is used in Sections 13(d) and 14(d) of the Securities Exchange Act of 1934, as amended) or group acting in concert, other than a trustee or other fiduciary holding securities under an employee benefit plan of the Company acting in such capacity or a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company, becomes the “beneficial owner” (as defined in Rule 13d-3 under said Act), directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the total voting power represented by the Company’s then outstanding voting securities, (ii) during any twelve (12)-month period, individuals who at the beginning of such period constitute the Board and any new director whose election by the Board or nomination for election by the Company’s stockholders was approved by a vote of at least two thirds (2/3) of the directors then in office who either were directors at the beginning of the period or...
whose election or nomination for election was previously so approved, cease for any reason to constitute a majority thereof, (iii) the consummation of a merger or consolidation of the Company with any other corporation other than a merger or consolidation that would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation or (iv) the sale or disposition by the Company of (in one (1) transaction or a series of related transactions) all or substantially all of the Company’s assets.

ii. Acceleration of Vesting of Equity Awards.

1. Upon a Change in Control, the time vesting and exercisability of one hundred percent (100%) of Employee’s Equity Awards shall immediately accelerate by a period of twelve (12) months, provided that this Section 7.2(b)(ii) shall apply to Performance Awards such that if the applicable performance period is scheduled to end within twelve (12) months following the Change in Control, the Performance Award shall be deemed to have been fully vested and earned as of the Change in Control based upon the greater of (A) an assumed achievement of all relevant performance goals at the “target” level or (B) the actual level of achievement of all relevant performance goals as of the Change in Control.

2. If within four (4) months before or twelve (12) months after a Change in Control, Employee incurs a Separation from Service initiated by the Company (or a successor) without Cause or initiated by Employee for Good Reason, then one hundred percent (100%) of Employee’s Equity Awards shall become fully vested and exercisable; and Employee shall be entitled to exercise such Equity Awards (if exercisable) in accordance with Section 7.f below. Performance Awards shall be deemed to have been fully vested and earned under this Section 7.b(ii)(2) based upon the greater of (1) an assumed achievement of all relevant performance goals at the “target” level or (2) the actual level of achievement of all relevant performance goals as of the Change in Control.

c. Conditions Precedent. The Company’s obligations to Employee described in Sections 7.a and 7.b above are contingent on Employee’s delivery to the Company of a signed waiver and release of claims against the Company and its Affiliates in a form reasonably satisfactory to the Company within twenty-one (21) days (or forty-five (45) days to the extent required by applicable law) after the day on which the Company provides the release to Employee, and not revoking such release (if a right to revocation exists under applicable law). Moreover, Employee’s rights to receive ongoing payments and benefits pursuant to Sections 7.a and 7.b above (including the right to ongoing payments under the Company’s equity compensation plans) are conditioned on Employee’s ongoing compliance with his or her obligations as described in Section 8 below, and Company may set off any such payments or benefits, except to the extent prohibited by law, in the event of Employee’s failure to comply with any such obligations. Any cessation by the Company of any such payments and benefits shall be in addition to, and not in lieu of, any and all other remedies available to the Company for Employee’s breach of his or her obligations described in Section 8 below.

d. No Severance Benefits. Employee shall not be entitled to any severance benefits if Employee initiates Employee’s Separation from Service without Good Reason or if the Company initiates Employee’s Separation from Service without Cause; provided, however, that Employee shall be entitled to (i) Base Salary prorated through the Separation from Service; and (ii) medical coverage and other benefits required by law and plans (as provided in Section 7.e below).
e. Benefits Required by Law and Plans. In the event of Employee’s Separation from Service, Employee shall be entitled to medical and other insurance coverage, if any, as is required by law and, to the extent not inconsistent with this Agreement, to receive such additional benefits as Employee may be entitled under the express terms of applicable benefit plans (other than bonus or severance plans) of the Company or its Affiliates.

f. Exercise Period of Equity Awards after Separation from Service. Notwithstanding any provision of this Agreement or any applicable Equity Award agreement to the contrary, (i) in the event of Employee’s Separation from Service initiated by the Company without Cause or by Employee for Good Reason or due to Employee’s disability or death, Employee’s vested and exercisable Equity Awards shall remain exercisable (if exercisable) until the earlier of two (2) years from such Separation from Service or the latest date on which those Equity Awards expire or are eligible to be exercised under the applicable award agreements, determined without regard to such Separation from Service and (ii) in the event of Employee’s Separation from Service initiated by the Cause for Cause of by Employee without Good Reason, the exercise periods of Employee’s Equity Awards shall continue to be governed by the terms of the applicable award agreements.


a. Non-Disclosure and Invention Agreement. In consideration for employment or continued employment by the Company, as well as the salary and additional compensation and benefits described in this Agreement, as well as the Company’s provision of confidential information of the Company to Employee, Employee has entered or shall enter into and shall comply with the terms of the Employee Non-Disclosure and Invention Assignment Agreement in substantially the form attached hereto as Exhibit A (the “Non-Disclosure and Invention Agreement”).

b. Restrictive Covenant Agreement. In consideration for employment or continued employment by the Company, as well as the salary and additional compensation and benefits described in this Agreement, as well as the Company’s provision of confidential information of the Company to Employee, Employee has entered or shall enter into and shall comply with the terms of the Employee Non-Competition, Non-Solicitation and No-Interference Agreement in substantially the form attached hereto as Exhibit B (the “Restrictive Covenant Agreement”).

9. Arbitration. Unless other arrangements are agreed to by the Parties, any disputes arising under or in connection with this Agreement, other than a dispute in which the primary relief sought is an equitable remedy such as an injunction, shall be resolved by binding arbitration to be conducted pursuant to the Agreement for Arbitration Procedures of Certain Employment Disputes in substantially the form attached hereto as Exhibit C.

10. Assignments: Transfers: Effect of Merger. No rights or obligations of the Company under this Agreement may be assigned or transferred by the Company except that such rights or obligations may be assigned or transferred pursuant to a merger or consolidation, or pursuant to the sale or transfer of all or substantially all of the assets of the Company, provided that the assignee or transferee is the successor to all or substantially all of the assets of the Company. This Agreement shall not be terminated by any merger, consolidation or transfer of assets of the Company referred to above. In the event of any such merger, consolidation or transfer of assets, this Agreement shall be binding upon the surviving or resulting corporation or the person or entity to which such assets are transferred. Concurrently with any merger, consolidation or transfer of assets referred to above, the Company shall cause any successor or transferee unconditionally to assume, either contractually or as a matter of law, all of the obligations of the Company hereunder. This Agreement shall inure to the benefit of, and be enforceable by or against, Employee or Employee’s personal or legal representatives, executors, administrators, successors, heirs, distributees, designees and legatees. None of Employee’s rights or obligations under this Agreement may be assigned or transferred by Employee other than Employee’s rights to compensation and benefits, which may be transferred only by will or operation of law. If Employee should die while any amounts or benefits have been accrued by Employee but not yet paid as of the date of Employee’s death and which would be payable to Employee hereunder had Employee continued to live, all such amounts and benefits unless otherwise
provided herein shall be paid or provided in accordance with the terms of this Agreement to such person or persons appointed in writing by Employee to receive such amounts or, if no such person is so appointed, to Employee’s estate.

11. **No Set-off; No Mitigation Required.** Except as expressly provided otherwise in this Agreement, the obligation of the Company to make any payments provided for hereunder or to otherwise perform its obligations hereunder shall not be affected by any set-off, counterclaim, recoupment, defense or other claim, right or action that the Company may have against Employee or others. In no event shall Employee be obligated to seek other employment or take other action by way of mitigation of the amounts payable to Employee under this Agreement, and such amounts shall not be reduced (except as otherwise specifically provided herein) whether or not Employee obtains other employment.

12. **Taxes.** The Company shall have the right to deduct from any payments made pursuant to this Agreement any and all federal, state and local taxes or other amounts required by law to be withheld.

13. **Code Section 409A.** This Agreement is intended to comply with Code Section 409A to the extent subject thereto, and, accordingly, to the maximum extent permitted, this Agreement shall be interpreted and administered to be in compliance therewith. Notwithstanding any provision of this Agreement to the contrary, to the extent required to avoid accelerated taxation or tax penalties under Code Section 409A, any amounts or benefits that would otherwise be payable under this Agreement during the six (6)-month period immediately following Employee’s Separation from Service shall instead be paid on the first payroll date after the six (6)-month anniversary of Employee’s Separation from Service (or Employee’s death, if earlier). For purposes of Code Section 409A, Employee’s right to receive any installment payments pursuant to this Agreement shall be treated as a right to receive a series of separate and distinct payments. Whenever a payment under this Agreement specifies a payment period with reference to a number of days, the actual date of payment within the specified period shall be in the sole discretion of the Company. Notwithstanding the foregoing, the Company shall not have any obligation to take any action to prevent the assessment of any excise tax or penalty on any person under Code Section 409A and the Company shall not have any liability to any person for such tax or penalty.

14. **Code Section 280G.** Notwithstanding any provision of this Agreement or any other plan, arrangement or agreement to the contrary, if any of the payments or benefits provided or to be provided by the Company or an Affiliate to Employee or for Employee’s benefit under this Agreement or otherwise (“Covered Payments”) constitute “parachute payments” within the meaning of Code Section 280G and would, but for this **Section 14**, be subject to the excise tax imposed under Code Section 4999 or any similar tax imposed by state or local law or any interest or penalties with respect to such taxes (collectively, the “Excise Tax”), then prior to making the Covered Payments, a calculation shall be made comparing (i) the Net Benefit to Employee of the Covered Payments after payment of the Excise Tax to (ii) the Net Benefit to Employee if the Covered Payments are limited to the extent necessary to avoid being subject to the Excise Tax; and if the amount calculated under (i) is less than the amount under (ii), the Covered Payments shall be reduced to the minimum extent necessary to ensure that no portion of the Covered Payments is subject to the Excise Tax. “Net Benefit” means the present value of the Covered Payments net of all taxes. All determinations required to be made under this **Section 14** shall be made by the Company in its sole discretion.

15. **Miscellaneous.** No amendment, modification or waiver of this Agreement or consent to any departure thereof shall be effective unless in writing signed by the Party against whom it is sought to be enforced. This Agreement contains the entire Agreement that exists between the Parties with respect to the subjects herein contained and replaces and supersedes all prior agreements, oral or written, between the Parties with respect to the subjects herein contained. Except as and to the extent expressly provided in this Agreement, nothing herein shall affect any terms in the Non-Disclosure and Invention Agreement, the Restrictive Covenant Agreement, the Agreement for Arbitration Procedures of Certain Employment Disputes or any equity compensation plans or corresponding award agreements between the Parties now and hereafter in effect from time to time. If any provision of this Agreement is held for any reason to be unenforceable, the remainder of this Agreement shall remain in full force and effect. Each section is intended to be a severable and independent section within this Agreement. The headings in this Agreement are intended solely for convenience of reference and shall be given no effect in the construction or interpretation of this
This Agreement is made in the State of Wisconsin and shall be governed by and construed in accordance with the laws of said State, without regard to principles of conflicts of law.

This Agreement may be executed in one (1) or more counterparts, each of which shall be deemed an original but all of which together shall constitute one (1) and the same instrument. All notices and all other communications provided for in this Agreement shall be in writing and shall be considered duly given upon personal delivery, delivery by nationally reputable overnight courier or on the third (3rd) business day after mailing from within the United States by first class certified or registered mail, return receipt requested, postage prepaid, all addressed to the address set forth below each Party’s signature to this Agreement. Any Party may change its address by furnishing notice of its new address to the other Party in writing in accordance herewith, except that any notice of change of address shall be effective only upon receipt.

IN WITNESS WHEREOF, Employee and the Company have executed this Employment Agreement as of the Effective Date.

**EMPLOYEE**
- Sign name: /s/ Jake Orville
- Print name: Jake Orville
- Notice address:

**EXACT SCIENCE CORPORATION**
- Sign name: /s/ Kevin T. Conroy
- Print name: Kevin T. Conroy
- Title: President and Chief Executive Officer
- Notice address:
Exact Sciences Corporation

Incentive Stock Option Award Agreement

Cover Sheet

Exact Sciences Corporation, a Delaware corporation, hereby grants to you (the Grantee named below), and you hereby accept, an Option on the following terms and subject to the terms and conditions specified in the attached Terms and Conditions.

Controlling Plan: Exact Sciences Corporation 2019 Omnibus Long-Term Incentive Plan

Grantee:

Grant Date:

Exercisability Start Date:

Number of Option Shares:

Option Price per Share: (which is the Fair Market Value on the Grant Date)

Type of Option Shares: This Option is intended to be an Incentive Stock Option. To the extent this Option fails to qualify as an Incentive Stock Option for any reason, the Option shall be treated as a Non-qualified Stock Option. The Company makes no representation or guarantee that this Option or any portion of the Option will qualify as an Incentive Stock Option.

Expiration Date: (which is 10 years from the Grant Date)

IN WITNESS WHEREOF, the Company and you have caused this instrument to be executed as of the Grant Date set forth above. If (1) you do not accept your Award Agreement through the online acceptance process within 120 days following the Grant Date (the “Deadline”), and (2) you do not provide written notice to the Company of your rejection of the Award Agreement by the Deadline, then the Company will automatically accept the Award Agreement on your behalf.

EXACT SCIENCES CORPORATION

Sign Name: 
Participant Name: Kevin T. Conroy
Title: President and CEO

Exact Sciences Corporation

Incentive Stock Option Award Agreement

Terms and Conditions
1. **Grant Under Plan.** The Company sponsors the Exact Sciences Corporation 2019 Omnibus Long-Term Incentive Plan (the “Plan”). The Plan and a prospectus describing the Plan (the “Prospectus”) have been delivered to you. The Plan is also available upon request (and publicly filed), and its terms and provisions are incorporated herein by reference. When used herein, the terms which are defined in the Plan shall have the meanings given to them in the Plan, as modified herein (if applicable). This Option is subject to the terms and conditions of the Plan and this Award Agreement. You acknowledge having read the Plan and the Prospectus and agree to be bound by all the terms and conditions of the Plan and this Award Agreement.

2. **Exercisability and Term of Option.** This Option shall become exercisable and remain exercisable only in accordance with Exhibit A attached hereto.

3. **Grant as Incentive Stock Option.** This Option is intended to qualify as an Incentive Stock Option. To the extent that the aggregate Fair Market Value (determined on the Grant Date) of the shares of Common Stock with respect to which this Option is exercisable (the “Option Shares”) for the first time by you during any calendar year (under all plans of the Company and its Subsidiaries) exceeds $100,000, this Option, or portion thereof that exceeds such limit (according to the order in which it was granted), shall be treated as a Non-qualified Stock Option. To the extent this Option fails to qualify as an Incentive Stock Option for any other reason, the Option shall be treated as a Non-qualified Stock Option. The Company makes no representation or guarantee that this Option or any portion thereof will qualify as an Incentive Stock Option. If you dispose of the Option Shares prior to the expiration of either two (2) years from the Grant Date or one (1) year from the date the Option Shares are transferred to you pursuant to the exercise of the Option (a “Disqualifying Disposition”), you shall notify the Company in writing within thirty (30) days after such disposition of the date and terms of such disposition. You also agrees to provide the Company with any information concerning any such dispositions as the Company requires for tax purposes.

4. **Payment of Option Price.** The Option Price shall be paid by one or any combination of the following forms of payment:

   (a) in cash, or by check payable to the order of the Company; or

   (b) in accordance with procedures as may be established by the Company and communicated to you in writing, by delivery of an irrevocable direction to a licensed securities broker acceptable to the Company to sell shares of Common Stock and to deliver all or part of the sales proceeds to the Company in payment of the Option Price.

5. **Method of Exercising Option.** Subject to the terms and conditions of this Award Agreement, this Option may be exercised by written notice to the Company at its principal executive office, or in accordance with such other procedures as may be established by the Company and communicated to you in writing. Such notice shall state the election to exercise this Option and the number of Option Shares for which it is being exercised and shall be accompanied by payment of the full Option Price of such Option Shares.

6. **No Rights as Stockholder until Exercise.** You shall have no rights as a stockholder with respect to the Option Shares until such time as you have exercised this Option by delivering a notice of exercise and have paid in full the Option Price for the Option Shares so exercised in accordance with Section 5 immediately above. Except as is expressly provided in the Plan with respect to certain changes in the capitalization of the Company, no adjustment shall be made for dividends or similar rights for which the record date is prior to such date of exercise.

7. **Capital Changes and Business Successions.** The existence of this Award shall not affect in any way the right or power of the Company or its stockholders to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company’s capital structure or its business, or any merger or consolidation of the Company, or any issue of bonds, debentures, preferred or prior preference stocks ahead of or convertible into, or otherwise affecting the Common Stock or the rights thereof, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise. The Plan contains provisions covering the treatment of options in a number of contingencies such as stock splits and mergers.
8. Miscellaneous

(a) Notices. The Company may, in its sole discretion, decide to deliver any documents related to this Option or future Awards that may be granted under the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and, if requested, agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Any notice which either party hereto may be required or permitted to give to the other shall be in writing and may be delivered personally, by interoffice mail, by fax, by electronic mail or other electronic means, or via a postal service, postage prepaid, to such electronic mail or postal address and directed to such person the Company may notify you of from time to time; and to you at your electronic mail or postal address as shown on the records of the Company from time to time, or at such other electronic mail or postal address as you, by notice to the Company, may designate in writing from time to time.

(b) Severability; Entire Agreement. In the event any provision of this Award Agreement shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Award Agreement, and the Award Agreement shall be construed and enforced as if the illegal or invalid provision had not been included. This Award Agreement together with any applicable provisions of any employment agreement constitute the final understanding between you and the Company regarding the Option Shares, provided, in the event of any conflict between the terms of an employment agreement and this Award Agreement, the terms of the employment agreement govern. Any prior agreements, commitments or negotiations concerning the Option Shares are superseded.

(c) Clawback; Insider Trading Policy. If any of the Company’s financial statements are required to be restated, the Company may recover all or a portion of this or any other Award made to you under the Plan with respect to any fiscal year of the Company the financial results of which are negatively affected by such restatement. The amount to be recovered shall be the amount, as determined by the Committee, by which the affected Award exceeds the amount that would have been payable had the financial statements been initially filed as restated. In no event shall the amount to be recovered by the Company be less than the amount required to be repaid or recovered as a matter of law. This Award and any other Award, amount or benefit received under the Plan shall be subject to potential cancellation, recoupment, rescission, payback or other action in accordance with the terms of any applicable Company clawback policy or any applicable law, as may be in effect from time to time. You hereby acknowledge and consent to the Company’s application, implementation and enforcement of any applicable Company clawback policy and any provision of applicable law relating to cancellation, recoupment, rescission or payback of compensation that may apply to you, whether adopted prior to or following the date of any Award made to you under the Plan. The Company may take such actions as may be necessary to effectuate any such policy or applicable law, without further consideration or action. In addition, you acknowledge and agree that you are subject to the Company’s Insider Trading Policy, which may be found in the Company’s Employee Handbook. To the extent allowed by applicable law, if it is determined at any time that you have engaged in any transactions involving the Company’s common stock in violation of the Company’s Insider Trading Policy, the Company will be entitled to apply this Section 8(c) to cause the cancellation, recoupment, rescission, or payback of the Award or any amount of benefit received pursuant to the Award.

(d) Grantees Employed Outside the U.S. Notwithstanding any provisions in this Award Agreement to the contrary, this Option shall be subject to any special terms and conditions applicable to employees based outside the U.S., as set forth in Exhibit B to this Award Agreement. You acknowledge having read the Prospectus and agree to be bound by all the terms and conditions of the Plan and this Award Agreement, including any special terms and conditions applicable to employees based outside the U.S., as set forth in Exhibit B. IN THE EVENT OF ANY CONFLICT BETWEEN THIS AWARD AGREEMENT, EXHIBIT A AND EXHIBIT B, THE PROVISIONS OF EXHIBIT B SHALL PREVAIL AND CONTROL THIS OPTION.
Exact Sciences Corporation

Incentive Stock Option Award Agreement

Exhibit A to Terms and Conditions - Exercisability

1. Exercisability of Option if Service Continues; Term of Option. All of the Option Shares initially shall be unexercisable shares. For so long as you remain continuously a Service Provider to the Company the Option Shares shall become exercisable according to the schedule set forth below and you may exercise this Option as to any exercisable shares:

<table>
<thead>
<tr>
<th>Exercisability Date</th>
<th>Number of Exercisable Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25% of the Option Shares</td>
</tr>
<tr>
<td></td>
<td>25% of the Option Shares</td>
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<td></td>
<td>25% of the Option Shares</td>
</tr>
<tr>
<td></td>
<td>25% of the Option Shares</td>
</tr>
</tbody>
</table>

Notwithstanding the foregoing, the Board may, in its discretion, accelerate the date that any installment of this Option becomes exercisable. The foregoing rights are cumulative and (subject to Sections 2 and 3 immediately below if you have a Separation from Service) may be exercised only before the Expiration Date. Following the expiration of this Option in accordance with the preceding sentence, all your rights hereunder will be forfeited and canceled in their entirety.

2. Separation from Service.

(a) Other Than for Cause. If you have a Separation from Service, other than by reason of death or disability as defined in Section 3 immediately below or termination for Cause, no further installments of this Option shall become exercisable, and this Option shall expire (that is, may no longer be exercised) after the passage of three months from your last day of Service, but in no event later than the scheduled Expiration Date. Following the expiration of this Option in accordance with the preceding sentence, all your rights hereunder will be forfeited and canceled in their entirety.

(b) For Cause. If you have a Separation from Service for Cause, this Option shall expire (that is, may no longer be exercised) upon your receipt of written notice of such termination and shall thereafter not be exercisable to any extent whatsoever. Following the expiration of this Option in accordance with the preceding sentence, all your rights hereunder will be forfeited and canceled in their entirety.

3. Death; Disability.

(a) Death. If you die while in Service to the Company, this Option may be exercised, to the extent otherwise exercisable on the date of death, by your estate, personal representative or beneficiary to whom this Option has been transferred, only at any time within 180 days after the date of death, but not later than the scheduled Expiration Date. Following the expiration of this Option in accordance with the preceding sentence, all your rights hereunder will be forfeited and canceled in their entirety.

(b) Disability. If you have a Separation from Service by reason of your disability, this Option may be exercised, to the extent otherwise exercisable on the date of cessation of Service, only at any time within 180 days after such cessation of Service, but not later than the scheduled Expiration Date. Following the expiration of this Option in accordance with the preceding sentence, all your rights hereunder will be forfeited and canceled in their entirety. For purposes hereof, “disability” means “permanent and total disability” as defined in Section 22(e)(3) of the Code.
4. **Automatic Exercise if In-the-Money at Expiration.** Notwithstanding any provision herein to the contrary, to the extent this Option is exercisable as of the date it would otherwise expire unexercised, and if the Fair Market Value of the Option Shares as of such date exceeds the Option Price, this Option, to the extent exercisable, shall automatically be exercised as of such date by a net exercise cashless method under which a number of Option Shares shall be withheld to cover the Option Price and any required tax withholding requirements, with the net shares after such costs of exercise issued to you. Such automatic exercise procedures shall not apply to this Option if you have so elected in writing under such procedures as the Company may establish from time to time or if you have a Separation from Service for Cause.
DATA PRIVACY

By accepting the option set forth in this Award Agreement to which this Exhibit B is attached (the “Option”), you hereby explicitly and unambiguously consent to the collection, use and transfer, in electronic or other form, of your personal data as described in this document by and among, as applicable, your employer and the Company and its Subsidiaries for the exclusive purpose of implementing, administering and managing the Option.

You understand that the Company and your employer hold certain personal information about you, including, but not limited to, your name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, details of any entitlement to shares of stock or equivalent benefits awarded, canceled, vested, unvested or outstanding in your favor (“Data”), for the purpose of implementing, administering and managing the Option. You understand that Data may be transferred to any third parties assisting in the implementation, administration and management of the Option, that these recipients may be located in your country or elsewhere, and that the recipient’s country may have different data privacy laws and protections from your country. You understand that you may request a list with the names and addresses of any potential recipients of the Data by contacting your local human resources representative. You authorize the recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing the Option. You understand that Data will be held only as long as is necessary to implement, administer and manage the Option. You understand that you may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing your local human resources representative. Further, you understand that you are providing the consents herein on a purely voluntary basis. If you do not consent, or if you later seek to revoke your consent, your employment status or service and career with your employer will not be adversely affected; the only adverse consequence of refusing or withdrawing your consent is that the Company would not be able to grant you the Option or other awards or administer or maintain such awards (so you would forfeit the Option and any such awards that are outstanding). Therefore, you understand that refusing or withdrawing your consent may affect your ability to benefit from the Option. For more information on the consequences of your refusal to consent or withdrawal of consent, you understand that you may contact your local human resources representative.

ADDITIONAL ACKNOWLEDGEMENTS

By entering into this Award Agreement and accepting the grant of the Option evidenced hereby, you acknowledge, understand and agree that:

(a) the Option is granted voluntarily by the Company and is discretionary in nature;

(b) the grant of the Option is voluntary and occasional and does not create any contractual or other right to receive future awards of options or benefits in lieu of options, even if such awards have been awarded in the past;

(c) all decisions with respect to future awards, if any, will be at the sole discretion of the Company;

(d) the grant of the Option shall not create a right to further employment or other service relationship with your employer and shall not interfere with the ability of your employer to terminate your employment or other service relationship at any time, with or without Cause;

(e) you are voluntarily accepting the grant of the Option;
(f) the Option and any payment made pursuant to the Option is not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or welfare benefits or similar payments, and in no event should be considered as compensation for, or in any way relating to, past services for the Company or any of its Subsidiaries;

(g) in the event that you are not an employee of the Company, the Option and your participation in the Plan will not be interpreted to form an employment contract or relationship with the Company; furthermore, the Option will not be interpreted to form an employment contract with any Subsidiary;

(h) the future value of the shares of Common Stock which determine the amount of the payment made pursuant to the Option is unknown and cannot be predicted with certainty;

(i) no claim or entitlement to compensation or damages shall arise from forfeiture of the Option resulting from termination of your employment by the Company or your employer (for any reason whatsoever and regardless of whether or not such termination is later found to be invalid or in breach of the employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any) or recoupment of all or any portion of any payment made pursuant to the Option and, in consideration of the grant of the Option to which you are not otherwise entitled, you irrevocably agree never to institute any claim against the Company or your employer, waive your ability, if any, to bring any such claim, and release the Company and your employer from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, you shall be deemed irrevocably to have agreed not to pursue such claim, and you agree to execute any and all documents necessary to request dismissal or withdrawal of such claim;

(j) for purposes of the Option, your employment will be considered terminated as of the date you are no longer actively employed and providing services to the Company or one of its Subsidiaries, and your right, if any, to earn and be permitted to exercise any portion of the Option pursuant to this Award Agreement after such termination of employment (for any reason whatsoever and regardless of whether or not such termination is later found to be invalid or in breach of the employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any) will be measured by the date you cease to be actively employed and will not be extended by any notice period mandated under local law (e.g., active employment would not include a period of “garden leave” or similar period mandated under the employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any); the Company, in its sole discretion, shall determine when you are no longer actively employed for purposes of the Option (including whether you may still be considered actively employed while on an approved leave of absence);

(k) unless otherwise provided in this Exhibit B, you are solely responsible for investigating and complying with any exchange control laws applicable to you in connection with any payment made pursuant to Option;

(l) unless otherwise provided in the Plan or by the Company in its discretion, the Option and the benefits evidenced by this Award Agreement do not create any entitlement to have the Option or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Common Stock;

(m) neither your employer, the Company or any of its Subsidiaries shall be liable for any foreign exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the Option or any payment made pursuant to the Option; and

(n) the Company is not providing any tax, legal or financial advice, nor is the Company making any recommendations regarding the Option. You are hereby advised to consult with your personal tax, legal and financial advisors regarding the Option before taking any action in relation thereto.

LANGUAGE
If you have received this Award Agreement or any other document related to the Plan translated into a language other than English and if the meaning of
the translated version differs from the English version, the English version shall control.

CHOICE OF LAW/VENUE

The validity, construction and effect of this Award Agreement are governed by, and subject to, the laws of the State of Wisconsin without giving effect to
the principles of conflicts of law, provided that the provisions set forth herein that are required to be governed by the Delaware General Corporation Law shall be
governed by such law, as provided in the Plan. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced
by the Option or this Award Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the federal and state courts located in the State of
Wisconsin, where this grant is made and/or to be performed, and no other courts.

FURTHER ACTIONS

The Company reserves the right to impose other requirements on the Option to the extent the Company determines it is necessary or advisable in order to
comply with local law or facilitate the administration of the Option and to require you to sign any additional agreements or undertakings that may be necessary to
accomplish the foregoing.
EXHIBIT 10.30

EXACT SCIENCES CORPORATION
2019 OMNIBUS LONG-TERM INCENTIVE PLAN
Restricted Stock Unit Award Agreement

Granted To:

Grant Date:

Number of Restricted Stock Units:

This Restricted Stock Unit Award Agreement ("Award Agreement") is made between Exact Sciences Corporation, a Delaware corporation (the "Company"), and you, a Service Provider to the Company ("Grantee").

The Company sponsors the 2019 Omnibus Long-Term Incentive Plan (the "Plan"). The Plan and a prospectus describing the Plan (the "Prospectus") have been delivered to you. The Plan is also available upon request (and publicly filed), and its terms and provisions are incorporated herein by reference. When used herein, the terms which are defined in the Plan shall have the meanings given to them in the Plan, as modified herein (if applicable).

The Restricted Stock Units covered by this Award Agreement are subject to the following terms and provisions:

1. Subject to the terms and conditions of the Plan and this Award Agreement, the Company awards to you the number of Restricted Stock Units shown above. Each Restricted Stock Unit shall have a value equal to the Fair Market Value of one (1) share of Common Stock (a "Share").

2. The Award of the Restricted Stock Units is subject to the terms and conditions of the Plan and this Award Agreement. You acknowledge having read the Plan and the Prospectus and agree to be bound by all the terms and conditions of the Plan and this Award Agreement.

3. The Restricted Stock Units covered by this Award shall become earned by, and payable to, you in the amounts and on the dates shown on the attached Exhibit A.

4. Unless and until the Restricted Stock Units have vested and Shares have been issued and delivered pursuant to this Award Agreement: (1) you shall have no voting, dividend, dividend equivalent or other rights as a stockholder with respect to the Restricted Stock Units, and (2) the Restricted Stock Units may not be assigned, alienated, pledged, attached, sold or otherwise transferred or encumbered by the Grantee.

5. You agree that you shall comply with (or provide adequate assurance as to future compliance with) all applicable securities laws and income tax laws as determined by the Company as a condition precedent to the delivery of any Shares pursuant to this Award Agreement. In addition, you agree that, upon request, you will furnish a letter agreement providing that (i) you will not distribute or resell any of said Shares in violation of the Securities Act of 1933, as amended, (ii) you will indemnify and hold the Company harmless against all liability for any such violation and (iii) you will accept all liability for any such violation.

6. You may designate a beneficiary to receive payment in connection with the Restricted Stock Units awarded hereunder in the event of your death while in service with the Company in accordance with the Company’s beneficiary designation procedures, as in effect from time to time. If you do not designate a beneficiary or if your designated beneficiary does not survive you, then your beneficiary will be your estate.

7. The existence of this Award shall not affect in any way the right or power of the Company or its stockholders to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company’s capital structure or its business, or any merger or consolidation of the Company, or any issue of bonds, debentures, preferred or prior preference stocks ahead of or convertible into, or otherwise affecting the Common Stock or the rights thereof, or the dissolution or liquidation of the Company, or any sale or transfer of
8. The Company may, in its sole discretion, decide to deliver any documents related to this or future Awards that may be granted under the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and, if requested, agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Any notice which either party hereto may be required or permitted to give to the other shall be in writing and may be delivered personally, by interoffice mail, by fax, by electronic mail or other electronic means, or via a postal service, postage prepaid, to such electronic mail or postal address and directed to such person the Company may notify you of from time to time; and to you at your electronic mail or postal address as shown on the records of the Company from time to time, or at such other electronic mail or postal address as you, by notice to the Company, may designate in writing from time to time.

9. Regardless of any action the Company takes with respect to any or all income tax, payroll tax or other tax-related withholding (“Tax-Related Items”), you acknowledge that the ultimate liability for all Tax-Related Items owed by you is and remains your responsibility and that the Company (i) makes no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the grant of Restricted Stock Units, including the grant and vesting of the Restricted Stock Units the subsequent sale of Shares acquired upon the vesting of the Restricted Stock Units and the receipt of any dividends; and (ii) does not commit to structure the terms of the grant or any aspect of the Restricted Stock Units to reduce or eliminate your liability for Tax-Related Items. In the event the Company determines that it must withhold any Tax-Related Items as a result of your participation in the Plan, you agree as a condition of the grant of the Restricted Stock Units to make arrangements satisfactory to the Company to enable it to satisfy all withholding requirements, including, but not limited to, withholding any applicable Tax-Related Items from the pay-out of the Restricted Stock Units. In addition, you authorize the Company to fulfill its withholding obligations by all legal means, including, but not limited to: withholding Tax-Related Items from your other cash compensation the Company pays to you; withholding Tax-Related Items from the cash proceeds, if any, received upon sale of any Shares received in payment for your Restricted Stock Units; and at the time of payment, withholding Shares sufficient to meet minimum withholding obligations for Tax-Related Items. The Company may refuse to issue and deliver Shares in payment of any earned Restricted Stock Units if you fail to comply with any withholding obligation.

10. In the event any provision of this Award Agreement shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Award Agreement, and the Award Agreement shall be construed and enforced as if the illegal or invalid provision had not been included. This Award Agreement together with any applicable provisions of any employment agreement constitute the final understanding between you and the Company regarding the Restricted Stock Units; provided, in the event of any conflict between the terms of an employment agreement and this Award Agreement, the terms of the employment agreement govern. Any prior agreements, commitments or negotiations concerning the Restricted Stock Units are superseded.

11. If any of the Company’s financial statements are required to be restated, the Company may recover all or a portion of this or any other Award made to you under the Plan with respect to any fiscal year of the Company the financial results of which are negatively affected by such restatement. The amount to be recovered shall be the amount, as determined by the Committee, by which the affected Award exceeds the amount that would have been payable had the financial statements been initially filed as restated. In no event shall the amount to be recovered by the Company be less than the amount required to be repaid or recovered as a matter of law. This Award and any other Award, amount or benefit received under the Plan shall be subject to potential cancellation, recoupment, rescission, payback or other action in accordance with the terms of any applicable Company clawback policy or any applicable law, as may be in effect from time to time. You hereby acknowledge and consent to the Company’s application, implementation and enforcement of any applicable Company clawback policy and any provision of applicable law relating to cancellation, recoupment, rescission or payback of compensation that may apply to you, whether adopted prior to or following the date of any Award made to you under the Plan. The Company may take such actions as may be necessary to effectuate
any such policy or applicable law, without further consideration or action. In addition, you acknowledge and agree that you are subject to the Company’s Insider Trading Policy, which may be found in the Company’s Employee Handbook. To the extent allowed by applicable law, if it is determined at any time that you have engaged in any transactions involving the Company’s common stock in violation of the Company’s Insider Trading Policy, the Company will be entitled to apply this paragraph 11 to cause the cancellation, recoupment, rescission, or payback of the Award or any amount of benefit received pursuant to the Award.

12. Notwithstanding any provisions in this Award Agreement to the contrary, the Restricted Stock Units shall be subject to any special terms and conditions applicable to employees based outside the U.S., as set forth in Exhibit B to this Agreement. You acknowledge having read the Prospectus and agree to be bound by all the terms and conditions of the Plan and this Award Agreement, including any special terms and conditions applicable to employees based outside the U.S., as set forth in Exhibit B. IN THE EVENT OF ANY CONFLICT BETWEEN THIS AWARD AGREEMENT, EXHIBIT A AND EXHIBIT B, THE PROVISIONS OF EXHIBIT B SHALL PREVAIL AND CONTROL THE RESTRICTED STOCK UNITS.

IN WITNESS WHEREOF, the Company has caused this Award Agreement to be executed by its duly authorized officer, and you have hereunto set your hand, all as of the Grant Date stated above.

If (1) you do not accept your Award Agreement through the online acceptance process within 120 days following the Grant Date (the “Deadline”), and (2) you do not provide written notice to the Company of your rejection of the Award Agreement by the Deadline, then the Company will automatically accept the Award Agreement on your behalf.

EXACT SCIENCES CORPORATION

By: Kevin Conroy
Participant Name
President and CEO

3
Exhibit A

Exact Sciences Corporation
2019 Omnibus Long-Term Incentive Plan
Vesting and Payment of Restricted Stock Units

(a) **Vesting Schedule.** Subject to the provisions of paragraph (b) below, the Restricted Stock Units shall become earned and vested in the following installments, if you remain a Service Provider through each of the vesting dates as follows:

<table>
<thead>
<tr>
<th>Vesting Date</th>
<th>Number of Restricted Stock Units That Become Earned and Vested</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>25%</td>
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<tr>
<td></td>
<td>25%</td>
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<td>25%</td>
</tr>
<tr>
<td></td>
<td>25%</td>
</tr>
</tbody>
</table>

(b) **Impact of Separation from Service.** If you have a Separation from Service prior to any of the above vesting date(s) for any reason (including your death or disability), then any Restricted Stock Units that had not yet become earned and vested under paragraph (a) above shall be immediately canceled and forfeited as of the date of such Separation from Service.

c) **Timing and Form of Payment.** Any Restricted Stock Units that become earned and vested shall be paid upon such vesting by issuance and delivery of one (1) Share for each Restricted Stock Unit that is payable. Delivery of Shares shall occur as soon as administratively practicable after the applicable vesting date, generally within thirty (30) days.

d) **Section 409A.** This Award is intended to comply with the requirements of Section 409A of the Code, to the extent applicable. Notwithstanding any provision of the Plan or this Agreement to the contrary, the Award shall be interpreted, operated and administered consistent with this intent.
DATA PRIVACY

By accepting the Restricted Stock Units, you hereby explicitly and unambiguously consent to the collection, use and transfer, in electronic or other form, of your personal data as described in this document by and among, as applicable, your employer and the Company and its Subsidiaries for the exclusive purpose of implementing, administering and managing the Restricted Stock Units.

You understand that the Company and your employer hold certain personal information about you, including, but not limited to, your name, home address and telephone number, date of birth, social insurance number or other identification number, salary, nationality, job title, any shares of stock or directorships held in the Company, details of any entitlement to shares of stock or equivalent benefits awarded, canceled, vested, unvested or outstanding in your favor (“Data”), for the purpose of implementing, administering and managing the Restricted Stock Units. You understand that Data may be transferred to any third parties assisting in the implementation, administration and management of the Restricted Stock Units, that these recipients may be located in your country or elsewhere, and that the recipient’s country may have different data privacy laws and protections from your country. You understand that you may request a list with the names and addresses of any potential recipients of the Data by contacting your local human resources representative. You authorize the recipients to receive, possess, use, retain and transfer the Data, in electronic or other form, for the purposes of implementing, administering and managing the Restricted Stock Units. You understand that Data will be held only as long as is necessary to implement, administer and manage the Restricted Stock Units. You understand that you may, at any time, view Data, request additional information about the storage and processing of Data, require any necessary amendments to Data or refuse or withdraw the consents herein, in any case without cost, by contacting in writing your local human resources representative. Further, you understand that you are providing the consents herein on a purely voluntary basis. If you do not consent, or if you later seek to revoke your consent, your employment status or service and career with your employer will not be adversely affected; the only adverse consequence of refusing or withdrawing your consent is that the Company would not be able to grant you Restricted Stock Units or other awards or administer or maintain such awards. Therefore, you understand that refusing or withdrawing your consent may affect your ability to benefit from the Restricted Stock Units. For more information on the consequences of your refusal to consent or withdrawal of consent, you understand that you may contact your local human resources representative.

ADDITIONAL ACKNOWLEDGEMENTS

By entering into this Agreement and accepting the grant of Restricted Stock Units evidenced hereby, you acknowledge, understand and agree that:

(a) the Restricted Stock Units are granted voluntarily by the Company, are discretionary in nature;
(b) the grant of Restricted Stock Units is voluntary and occasional and does not create any contractual or other right to receive future awards of Restricted Stock Units or benefits in lieu of Restricted Stock Units, even if such awards have been awarded in the past;
(c) all decisions with respect to future awards, if any, will be at the sole discretion of the Company;
(d) the grant of Restricted Stock Units shall not create a right to further employment or other service relationship with your employer and shall not interfere with the ability of your employer to terminate your employment or other service relationship at any time, with or without Cause;
(e) you are voluntarily accepting the grant of Restricted Stock Units;

(f) the Restricted Stock Units and any payment made pursuant to the Restricted Stock Units are not part of normal or expected compensation or salary for any purposes, including, but not limited to, calculating any severance, resignation, termination, redundancy, dismissal, end-of-service payments, bonuses, long-service awards, pension or retirement benefits or welfare benefits or similar payments, and in no event should be considered as compensation for, or in any way relating to, past services for the Company or any of its Subsidiaries;

(g) in the event that you are not an employee of the Company, the Restricted Stock Units and your participation in the Plan will not be interpreted to form an employment contract or relationship with the Company; furthermore, the Restricted Stock Units will not be interpreted to form an employment contract with any Subsidiary;

(h) the future value of the Shares which determine the amount of the payment made pursuant to the Restricted Stock Units is unknown and cannot be predicted with certainty;

(i) no claim or entitlement to compensation or damages shall arise from forfeiture of the Restricted Stock Units resulting from termination of your employment by the Company or your employer (for any reason whatsoever and regardless of whether or not such termination is later found to be invalid or in breach of the employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any) or recoupment of all or any portion of any payment made pursuant to the Restricted Stock Units and, in consideration of the grant of the Restricted Stock Units to which you are not otherwise entitled, you irrevocably agree never to institute any claim against the Company or your employer, waive your ability, if any, to bring any such claim, and release the Company and your employer from any such claim; if, notwithstanding the foregoing, any such claim is allowed by a court of competent jurisdiction, then, by participating in the Plan, you shall be deemed irrevocably to have agreed not to pursue such claim, and you agree to execute any and all documents necessary to request dismissal or withdrawal of such claim;

(j) for purposes of the Restricted Stock Units, your employment will be considered terminated as of the date you are no longer actively employed and providing services to the Company or one of its Subsidiaries, and your right, if any, to earn and be paid any portion of the Restricted Stock Units pursuant to this Agreement after such termination of employment (for any reason whatsoever and regardless of whether or not such termination is later found to be invalid or in breach of the employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any) will be measured by the date you cease to be actively employed and will not be extended by any notice period mandated under local law (e.g., active employment would not include a period of “garden leave” or similar period mandated under the employment laws in the jurisdiction where you are employed or the terms of your employment agreement, if any); the Company, in its sole discretion, shall determine when you are no longer actively employed for purposes of the Restricted Stock Units (including whether you may still be considered actively employed while on an approved leave of absence);

(k) unless otherwise provided in this Exhibit B, you are solely responsible for investigating and complying with any exchange control laws applicable to you in connection with any payment made pursuant to Restricted Stock Units;

(l) unless otherwise provided in the Plan or by the Company in its discretion, the Restricted Stock Units and the benefits evidenced by this Agreement do not create any entitlement to have the Restricted Stock Units or any such benefits transferred to, or assumed by, another company nor to be exchanged, cashed out or substituted for, in connection with any corporate transaction affecting the Company’s common stock;
(m) neither your employer, the Company or any of its Subsidiaries shall be liable for any foreign exchange rate fluctuation between your local currency and the United States Dollar that may affect the value of the Restricted Stock Units or any payment made pursuant to the Restricted Stock Units; and

(n) the Company is not providing any tax, legal, or financial advice, nor is the Company making any recommendations regarding the Restricted Stock Units. You are hereby advised to consult with your personal tax, legal and financial advisors regarding the Restricted Stock Units before taking any action in relation thereto.

LANGUAGE

If you have received this Award Agreement or any other document related to the Plan translated into a language other than English and if the meaning of the translated version differs from the English version, the English version shall control.

CHOICE OF LAW/VENUE

The validity, construction and effect of this Agreement are governed by, and subject to, the laws of the State of Wisconsin without giving effect to the principles of conflicts of law, provided that the provisions set forth herein that are required to be governed by the Delaware General Corporation Law shall be governed by such law, as provided in the Plan. For purposes of litigating any dispute that arises directly or indirectly from the relationship of the parties evidenced by this grant or this Agreement, the parties hereby submit to and consent to the exclusive jurisdiction of the federal and state courts located in the State of Wisconsin, where this grant is made and/or to be performed, and no other courts.

FURTHER ACTIONS

The Company reserves the right to impose other requirements on the Award to the extent the Company determines it is necessary or advisable in order to comply with local law or facilitate the administration of the Award and to require you to sign any additional agreements or undertakings that may be necessary to accomplish the foregoing.
EXACT SCIENCES CORPORATION
2019 OMNIBUS LONG-TERM INCENTIVE PLAN

Restricted Stock Award Agreement

Granted To:

Grant Date:

Number of Restricted Stock Units:

Fair Market Value Per Share:

This Restricted Stock Award Agreement ("Award Agreement") is made between Exact Sciences Corporation, a Delaware corporation, (the "Company") and you ("Grantee").

The Company sponsors the 2019 Omnibus Long-Term Incentive Plan (the "Plan"). The Plan and a Prospectus describing the Plan (the "Prospectus") have been delivered to you. The Plan is also available upon request (and is publicly filed), and its terms and provisions are incorporated herein by reference. When used herein, the terms which are defined in the Plan shall have the meanings given to them in the Plan, as modified herein (if applicable).

The Award described in this Award Agreement is for the number of shares of the Company’s Common Stock shown above (the “Shares”). You and the Company mutually covenant and agree as follows:

1. The Award of the Shares is subject to the terms and conditions of the Plan and this Award Agreement. You acknowledge having read the Plan and Prospectus and agree to be bound by all the terms and conditions of the Plan and this Award Agreement.

2. You agree that, upon request, you will furnish a letter agreement providing that you will not distribute or resell any of said Shares in violation of the Securities Act of 1933, as amended, that you will indemnify and hold the Company harmless against all liability for any such violation and that you will accept all liability for any such violation.

3. The Shares shall vest in accordance with Exhibit A attached hereto. Until they become vested, the Shares shall be held by the Company. Vested Shares shall be delivered to you as soon as practicable following the applicable date of vesting. In that regard, you agree that you shall comply with (or provide adequate assurance as to future compliance with) all applicable securities laws and income tax laws as determined by the Company as a condition precedent to the delivery of the Shares. While the Shares are held by the Company, you shall not have the right to sell or otherwise dispose of such Shares or any interest therein.

4. In accordance with Section 10.3 of the Plan, you shall have the right to receive dividends on the Shares and to vote the Shares prior to vesting.

5. You acknowledge and agree that upon your Separation from Service resulting in the forfeiture of any unvested Shares in accordance with paragraph 3 above and Exhibit A attached hereto, (i) your right to vote and to receive cash dividends on, and all other rights, title or interest in, to or with respect to, unvested Shares shall automatically, without further act, terminate and (ii) the unvested Shares shall be returned to the Company. You hereby irrevocably appoint (which appointment is coupled with an interest) the Company as your agent and attorney-in-fact to take any necessary or appropriate action to cause the Shares to be returned to the Company, including without limitation executing and delivering stock powers and instruments of transfer, making endorsements and/or making, initiating or issuing instructions or entitlement orders, all in your name and on your behalf. You hereby ratify and approve all acts done by the Company as such attorney-in-fact. Without
limiting the foregoing, you expressly acknowledge and agree that any transfer agent for the Shares is fully authorized and protected in relying on, and shall incur no liability in acting on, any documents, instruments, endorsements, instructions, orders or communications from the Company in connection with the Shares or the transfer thereof, and that any such transfer agent is a third party beneficiary of this Award Agreement.

6. The existence of this Award shall not affect in any way the right or power of the Company or its stockholders to make or authorize any or all adjustments, recapitalizations, reorganizations or other changes in the Company’s capital structure or its business, or any merger or consolidation of the Company, or any issue of bonds, debentures, preferred or prior preference stocks ahead of or convertible into, or otherwise affecting the Common Stock or the rights thereof, or the dissolution or liquidation of the Company, or any sale or transfer of all or any part of its assets or business, or any other corporate act or proceeding, whether of a similar character or otherwise.

7. The Company may, in its sole discretion, decide to deliver any documents related to this option or future Awards that may be granted under the Plan by electronic means. You hereby consent to receive such documents by electronic delivery and, if requested, agree to participate in the Plan through an on-line or electronic system established and maintained by the Company or another third party designated by the Company. Any notice which either party hereto may be required or permitted to give to the other shall be in writing and may be delivered personally, by interoffice mail, by fax, by electronic mail or other electronic means, or via a postal service, postage prepaid, to such electronic mail or postal address and directed to such person the Company may notify you of from time to time; and to you at your electronic mail or postal address as shown on the records of the Company from time to time, or at such other electronic mail or postal address as you, by notice to the Company, may designate in writing from time to time.

8. Regardless of any action the Company takes with respect to any or all income tax, payroll tax or other tax-related withholding (“Tax-Related Items”), you acknowledge that the ultimate liability for all Tax-Related Items owed by you is and remains your responsibility and that the Company (i) makes no representations or undertakings regarding the treatment of any Tax-Related Items in connection with any aspect of the grant of Shares, including the grant and vesting of the Shares, the subsequent sale of such Shares and the receipt of any dividends; and (ii) does not commit to structure the terms of the grant or any aspect of the Award Agreement to reduce or eliminate your liability for Tax-Related Items.

9. In the event any provision of this Award Agreement shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Award Agreement, and the Award Agreement shall be construed and enforced as if the illegal or invalid provision had not been included. This Award Agreement together with any applicable provisions of any service agreement constitute the final understanding between you and the Company regarding the Shares; provided, in the event of any conflict between the terms of a service agreement and this Award Agreement, the terms of the service agreement govern. Any prior agreements, commitments or negotiations concerning the Shares are superseded.

10. If any of the Company’s financial statements are required to be restated, the Company may recover all or a portion of this or any other Award made to you under the Plan with respect to any fiscal year of the Company the financial results of which are negatively affected by such restatement. The amount to be recovered shall be the amount, as determined by the Committee, by which the affected Award exceeds the amount that would have been payable had the financial statements been initially filed as restated. In no event shall the amount to be recovered by the Company be less than the amount required to be repaid or recovered as a matter of law. This Award and any other Award, amount or benefit received under the Plan shall be subject to potential cancellation, recoupment, rescission, payback or other action in accordance with the terms of any applicable Company clawback policy or any applicable law, as may be in effect from time to time. You hereby acknowledge and consent to the Company’s application, implementation and enforcement of any applicable Company clawback policy and any provision of applicable law relating to cancellation, recoupment, rescission or payback of compensation that may apply to you, whether adopted prior to or following the date of any Award made to you under the Plan. The Company may take such actions as may be necessary to effectuate any such policy or applicable law, without further consideration or action. In addition, you acknowledge and agree
that you are subject to the Company’s Insider Trading Policy, which may be found in the Company’s Employee Handbook. To the extent allowed by applicable law, if it is determined at any time that you have engaged in any transactions involving the Company’s common stock in violation of the Company’s Insider Trading Policy, the Company will be entitled to apply this paragraph 10 to cause the cancellation, recoupment, rescission, or payback of the Award or any amount of benefit received pursuant to the Award.

IN WITNESS WHEREOF, the Company has caused this Award Agreement to be executed by its duly authorized officer, and you have hereunto set your hand, all as of the Grant Date stated above.

If (1) you do not accept your Award Agreement through the online acceptance process within 120 days following the Grant Date (the “Deadline”), and (2) you do not provide written notice to the Company of your rejection of the Award Agreement by the Deadline, then the Company will automatically accept the Award Agreement on your behalf.

ParticipantName

EXACT SCIENCES CORPORATION

By: ____________________________
Name: Kevin Conroy
Title: President and CEO
Registrant’s consolidated subsidiaries are shown below, together with the state or jurisdiction of organization of each subsidiary and the percentage of voting securities that Registrant owns in each subsidiary.

<table>
<thead>
<tr>
<th>Name of Subsidiary</th>
<th>Jurisdiction of Incorporation or Organization</th>
<th>Percent of Outstanding Voting Securities Owned as of December 31, 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genomic Health, Inc.</td>
<td>Delaware</td>
<td>100%</td>
</tr>
<tr>
<td>Genomic Health International Holdings, LLC</td>
<td>Delaware</td>
<td>100%</td>
</tr>
<tr>
<td>Exact Sciences Development Company, LLC</td>
<td>Delaware</td>
<td>100%</td>
</tr>
<tr>
<td>Exact Sciences Laboratories LLC</td>
<td>Delaware</td>
<td>100%</td>
</tr>
</tbody>
</table>
EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Exact Sciences Corporation
Madison, Wisconsin

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-218535) and Form S-8 (No. 333-219553; No. 333-212730; No. 333-211099; No. 333-207703; No. 333-190350; No. 333-168909; No. 333-164467; and No. 333-158307) of Exact Sciences Corporation of our reports dated February 21, 2020, relating to the consolidated financial statements, and the effectiveness of Exact Sciences Corporation’s internal control over financial reporting, which appear in this Form 10-K.

/s/ BDO USA, LLP
Madison, Wisconsin
February 21, 2020
CERTIFICATION

I, Kevin T. Conroy, certify that:

1. I have reviewed this annual report on Form 10-K of Exact Sciences Corporation;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
   d) Disclosed in this annual report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Dated: February 21, 2020

/s/ Kevin T. Conroy

Name: Kevin T. Conroy

Title: President and Chief Executive Officer

(Principal Executive Officer)
CERTIFICATION

I, Jeffrey T. Elliott, certify that:

1. I have reviewed this annual report on Form 10-K of Exact Sciences Corporation;

2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;

3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this annual report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
   d) Disclosed in this annual report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter (the registrant’s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):
   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and
   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting

Dated: February 21, 2020

/s/ Jeffrey T. Elliott
Name: Jeffrey T. Elliott
Title: Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)
CERTIFICATION
PURSUANT TO 18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of Exact Sciences Corporation (the “Company”) for the year ended December 31, 2019 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), we, Kevin T. Conroy, President and Chief Executive Officer of the Company and Jeffrey T. Elliott, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to our knowledge that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: February 21, 2020
/s/ Kevin T. Conroy
Name: Kevin T. Conroy
Title: President and Chief Executive Officer

(Principal Executive Officer)

Dated: February 21, 2020
/s/ Jeffrey T. Elliott
Name: Jeffrey T. Elliott
Title: Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)